THUTOMOBILE

WEEKLY

NEW YORK-SATURDAY, AUGUST 13, 1904-CHICAGO

10 CENTS

FINISH OF 3,400-MILE NON-STOP RUN.

NE of the most remarkable demonstrations of the possibilities of the automobile terminated Tuesday morning, when F. A. La Roche stopped the engine of his Darracq car after it had run continuously for fifteen days, traveling from New York to St. Louis and back. The performance broke all non-stop records

across the Tottenville ferry to Perth Amboy. On top of the hill from the ferry the travel-stained car was seen with Mr. La Roche and H. H. Everett, one of his observers. They had arrived from Philadelphia some hours earlier and were awaiting the arrival of the party and of the especially chartered ferry boat. The

organization. On another special ferry boat they went from Stapleton to New York, where they drove up Broadway and Fifth Avenue to the A. C. A. clubhouse, where, at 11.44 a. m., the motor was stopped.

The distance traveled by the machine was about 3,400 miles and the total time taken for the round trip was fifteen days two



LA ROCHE AND PARTY IN THE EXPOSITION GROUNDS AT ST. LOUIS, THE TURNING POINT IN THE LONG NON-STOP RUN.

by more than 1,000 miles, and incidentally showed that there are no roads impossible to an automobile in the hands of a skillful operator.

Early on Tuesday morning a party of Mr. La Roche's friends and newspaper men left New York in two machines to meet him. They went over to Staten Island and

latter was necessary owing to the recent enforcement of the law requiring all machines to stop their engines while on public ferries.

After crossing the Kills the party went to the Columbia Fishing Club on South Bay, where they were entertained at breakfast by R. R. Debacker, president of the hours. The car showed the effects of its experiences over the rough trails in Ohio called roads, the body being covered with mud, but on the ferry over to New York the motor ran smoothly and quietly. Before starting on the trip switches had been arranged for different sets of batteries so that they could be quickly changed. The

relief cock hole.

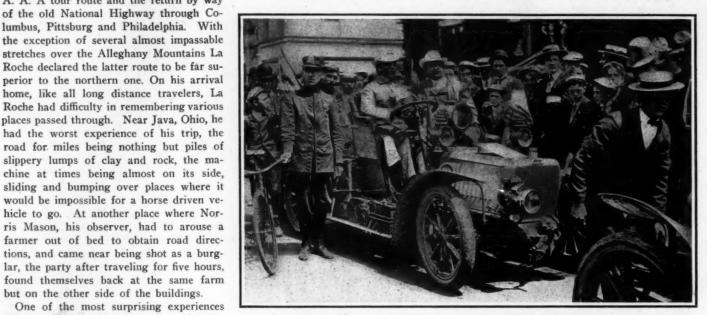
WHITMAN STARTS EAST.

Transcontinentalist Begins Second Oceanto-Ocean Trip at 'Frisco.

Special Correspondence.

SAN FRANCISCO, Aug. I.-L. L. Whitman, of Pasadena, Cal., who made the transcontinental trip last summer in 73 days in

worth, Nev., and for about two or three miles near Winnemucca, in the same State. Including equipment and supplies, the car weighs 1,400 pounds, to which is added a combined weight of 332 pounds for the two men. This is the first attempt to make the run in an air-cooled machine, and Mr. Whitman stated this afternoon that his greatest interest is to discover how this type of car



END OF MOTOR NON-STOP RUN AT A. C. A. CLUBHOUSE, NEW YORK, AUGUST 9.

but on the other side of the buildings. One of the most surprising experiences of the trip was the manner in which the Michelin tires with which the car was fitted held up. Extra tires had been sent to meet the party in St. Louis, beside the extra set carried on the machine, but on the whole trip it was necessary to replace only one tire, the shoe of which was cut by a broken bottle, causing the inner tube to blow through. The front tires were not touched, it is asserted, from start to finish, it not even being necessary to blow them

relief cocks on top of the cylinders were

also removed and spark plugs inserted in

their places so that when, as occurred many

times during the run, one or another

of the cylinders was found to be missing,

the wire would be removed from the reg-

ular plug and attached to the plug in the

The route followed to St. Louis was the

A. A. A tour route and the return by way of the old National Highway through Co-

Roche declared the latter route to be far su-

slippery lumps of clay and rock, the ma-

During the trip La Roache alternated on the car with Lieutenant Le Blanc, of the Brooklyn navy yard, the observers being Norris Mason and H. H. Everett. Mr. Mason's report is an interesting summary of the trip. Following is a summary:

an Oldsmobile, started at 4 o'clock this afternoon in a Franklin in an attempt to break the San Francisco-New York record of 61 days, now held by Tom Fetch and the Packard. Mr. Whitman is the first driver to make a second attempt at the ocean-to-ocean tour, and has the advantage of his former experience. He is accompanied by C. S. Carris, of Syracuse, as mechanic. They carry with them one extra tire, three inner tubes, six batteries, ropes to wind round the tires and an axe. Last year Whitman took with him strips of canvas to lay down over stretches of sand, but he says that these were needed in only two places,-for a distance of about five miles near Wads-

will stand the tedious drive over the hot sands through Nevada and Utah.

Thus far only three machines have made the run from San Francisco to New York. The record of 61 days is held by the Packard. The two other cars which have completed the tour are Dr. Jackson's 20-horsepower Winton and Whitman's Oldsmobile. In his run last year Mr. Whitman ran from California to Maine, his cyclometer reading 4,500 miles. He started July 6, and of the 73 days was delayed for nine days in one stretch at Omaha by floods in Nebraska.

The route to be followed this time will vary but slightly from that of last year. Speaking of the route to be taken, and of his trip generally, Mr. Whitman said yes-

"The route follows rather closely the Southern Pacific railroad line from San Francisco to Ogden, then the line of the Union Pacific to Laramie and Denver, and along the Platte River to Omaha. Crossing the Missouri River we will make for Des Moines and Cedar Rapids, and cross the Mississippi River at Clinton or Davenport, thence to Chicago and eastward through South Bend, Toledo, Cleveland, Erie, Buffalo, Albany and down the east bank of the Hudson to New York City."

A Party of automobilists recently toured from Oregon to Los Angeles in an automobile, carrying with them a complete camping outfit and making night stops where time and place suited them.

RECORD OF ARRIVALS AND DEPARTURES IN PRINCIPAL CITIES.

City.	Arrived.			Departed.			
New York City				Jt	dy :	25	9.44 a.m.
Peekskill July	25	12:24	p.m.	Ju	ly a	25	12:30 p.m.
PoughkeepsieJuly	25	3:07	p.m.	Ju	ly a	25	3:22 p.m.
Hudson July	25	6:02	p.m.	Ju	dy a	25	
AlbanyJuly	25	9.00	p.m.				**********
Syracuse				Ju	ly a	26	3:10 p.m.
BuffaloJuly	27	3:05	p.m.	Ju	ly 2	27	******
ClevelandJuly	28	10:55	a.m.				
Toledo	28	10:15	p.m.	Ju	ily a	28	10:38 p.m.
South Bend	29	10:50	p.m.				
Chicago	* * *			Ju	ily 3	30	12:05 p.m.
Bloomington	31	4:50	a.m.	Ju	ly 3	11	5:45 a.m.
SpringfieldJuly	31	10:50	a.m.	Ju	ly 3	31	3:30 p.m.
St. Louis	X	12:13	a.m.	A	ug.	3	********
Terre HauteAug.	. 3	7:30	p.m.				
Indianapolis	3	13:00	p.m.	A	ug.	4	12:30 a.m.
RichmondAug.	4	6:30	a.m.	A.	ug.	4	7:00 a.m.
Columbus	4	2:00	p.m.	A	ug.	4	4:00 p.m.
Pittsburg	. 5	11:00	a.m.	. A	ug.	5	
Philadelphia	8	11:35	a.m.	A	ug.	8	4:00 p.m.
New York CityAug.	9	11:44	a.m.				

FINAL STAGES OF THE ST. LOUIS RUN.

Tourists Enter Chicago in Triumphant Procession Escorted by Chicago Automobile Club Members and Continue Journey to Their Destination.

Special Correspondence.

CHICAGO, Aug. 7.—Leaving Cleveland Wednesday morning, some starting as early as 4 a. m., the run to Toledo was found to be a comparatively easy one, although the distance was a good 100 miles, some say twenty miles over. Luncheon on Wednesday was scheduled for Norwalk, and "Colonel" Sprague had worked up the hotel keeper to such a pitch that it proved to be one of the finest meals the party has yet partaken of. More tourists stopped for lunch that day than have sat down together for a noon-day meal since the run started from New York.

There have been the same minor troubles experienced during the past week that characterized the run of a week ago, yet the tourists, now that Chicago has been

safely reached, feel confident that they will soon feel the bumps of the St. Louis car tracks beneath their tires, and are cheering up wonderfully. The going, too, since there have been no further signs of rain, has on the whole been fairly smooth, and no more letters condemning roads have been sent in to the governors of the States passed through since leaving New York.

Of racing, the writer can say little, as his car is geared

for touring and twenty-five miles an hour seemed pretty good touring speed until we started on this tour. There are cars that pass us traveling two feet to our one, but there are a few cars that have found we can run around, even if geared low. We have not caught the racing fever, but we would give our next month's income if our front sprocket had four—yes, even three—more teeth in it.

I thought we had some dust on the first trip to St. Louis and return, but have found out that we did not know what dust was at that time; we do now. Formerly it was only the dust our own car raised. now it is the dust from forty other machines intermingled with ours. Two machines in the tour are equipped with the Brown dust guards. One other machine has an improvised dust guard.

We have used up six pair of auto goggles since we originally set out on this St. Louis touring business, but at no time have

we felt the need of goggles as we do at present. It isn't the flies and bugs that bother us now, but the dust. When we overtake a slower machine we take its dust for from one to five miles before we have an opportunity to go by. If a faster machine overtakes us we are obliged to take its dust until it gets out of sight.

It is amusing to note the signs appearing on the different cars participating in this run. When the machines left New York on July 25 there were signs on only two of the cars—ours with signs on either side reading: "New York to St. Louis," and the Darracq, driven by La Roche, bearing a huge sign on the tonneau door telling about the non-stop run it was engaged in. At Albany, when the Boston contingency thinking up signs to be added just before entering the World's Fair city.

Early morning starts are much in order even yet, for when cars of the same power are driven by operators of equal experience it is the car that starts first that is first to reach its destination and get the most attention in the newspaper story of the day's arrivals. Among the early starters each morning is J. M. Waters and his chauffeur Gretchel, resulting in the Panhard being pretty favorably known all along the line. The peculiar hollow exhaust of the Panhard can be heard on the still morning air for over a mile.

The tourists were much surprised to find at South Bend a hotel—the Oliver—as good as they had been accustomed to in their own

home, whether it was Boston, Philadelphia, New York, Buffalo or Cleveland. Mr. Oliver, the millionaire owner of the hotel, and incidentally of a large slice of the city of South Bend, including the famous plow and wagon works that bear his name, was down in front of the hotel to see the automobilists start off for Chicago on Saturday morning. It is doubtful if any one among the tourists gave the little old phaeton, or its sole occupant, a little old man in very

ordinary clothes, wearing a faded straw hat and blue calico shirt, a passing glance. His ancient looking horse and wagon remained at the curb until the last of the tourists had left.

Frank X. Mudd and about two dozen good fellows from Chicago Automobile Club ran down to South Bend to act as an escort to Chicago. The bulletin Friday night said that the official start would be made at 7:30 a. m., that dinner would be partaken of by the crowd at Valparaiso and that those arriving in Chicago early should wait in Jackson Park until 4 o'clock in the afternoon, when all would invade the city in a body, escorted by the members of the Chicago Automobile Club.

Everything seemed to go wrong from the start. Instead of waiting until 7:30 o'clock many left before 5:30 a. m., among them a number of the members of the Chicago club. With this big gathering of machines on the road racing couldn't be stopped,



J. M. WATERS STOPS DWIGHT HUSS TO BORROW FEED FOR HIS PANHARD MOTOR.

came in with several cars fresh from their hill climbing triumphs in the White Mountains, the Pierce Arrow bore an announcement: "Mt. Washington to St. Louis." Then the Haynes-Apperson came out with the sign: "Gold Medal Winner White Mountain Endurance Run;" and the White steamer driven by Webb Jay put out a sign on the tonneau: "This car won first place in the New York-Pittsburg Endurance The Elmore then added another line of lettering, making the sign read: "Second Trip, New York to St. Louis." The Franklin air-cooled then appeared with a sign reading: "We take no Water." Mr. Glidden had a sign made, reading "Arctic Circle," which he tacked on the rear of the big Napier, and when the little Covert joined the procession at Lockport, Mr. Hoag had a "Baby" tacked on the rear of the seat. Other cars carry signs reading: "New York to St. Louis," or "Boston to St. Louis," while still other participants are and soon they were off in full tilt. R. A. Kent and R. W. Sturtevant, in a 1903 Cadillac, were among the Chicago contingent that started early, and in taking a curve at the foot of a steep, sandy hill, their machine went crashing over a fifteenfoot embankment, turning completely over twice in its descent to the bottom. Kent, who was at the wheel, was pinned in and went over twice with the machine, breaking his left wrist and otherwise injuring himself. Sturtevant, who was in the tonneau, escaped with a few bruises. Three hours later a crew from La Porte was seen hauling out the wrecked car. Kent, while awaiting a train for Chicago, said: "I don't mind getting hurt, but I do so hate to take the train back home."

When arriving at Valparaiso we naturally expected to find the party awaiting luncheon as planned, but there was no one there with the exception of the Haynes-Apperson crew, with Birchwood frantically telephoning back to South Bend for the watch he had left under his pillow. Mr. and Mrs. Gillette, in the Pope-Hartford, came up a few minutes later. It was only 11:15 a. m. and the landlord said he would not have dinner until 12 o'clock, so we decided to move on. The trail of confetti was very indistinct and the most important turns were unmarked, which occasioned considerable delay and more or less wrong going.

Just west of Valparaiso we came upon another wrecked automobile lying bottom upward at the side of the road. It was a big Winton which had left early in the morning with the object of establishing a record between South Bend and Chicago. The car was manned by R. S. John and E. F. Meyer, of the Chicago Automobile Club, who had left the Oliver at 4:30 a. m. Neither man was injured beyond a few scratches.

The city of Valparaiso was crowded,



WINTON CAR OVERTURNED NEAR VALPARAISO OWING TO RECKLESS DRIVING.

fully 500 farmers' rigs being tied around the town square, the farmers having come for miles to see the automobiles come in, as Valparaiso was advertised as the noon stopping place.

R. H. Johnson and E. S. Morton, driving a Peerless limousine, joined the run at Cleveland. The enclosed car is called by the natives all along the line "the house on an automobile." The car has 24 horse-power and although built for slow driving shows considerable speed.

Members of the Chicago Automobile Club to the number of 400 were awaiting the arrival of the tourists at Jackson Park, and at 3 o'clock the cars were lined up according to their serial numbers and the parade to the Auditorium started. Large crowds lined up on the walks on either side and cheered the tourists as they passed along. The line of march led down Michigan boulevard, passed the Chicago Automobile Clubhouse, which was profusely dec-

orated with flags and bunting, through several of the downtown streets and eventually back to the Auditorium Annex, where it broke up, the tired and dusty travellers going to their rooms at once.

Chicago to Pontiac.

Pontiac, Ill., Aug. 9.—The run from Chicago to Joliet on Monday morning assumed less the proportions of a road race than at any of the previous stages. The Joliet Automobile Club, about seventy-five enthusiasts in one-quarter that number of machines, ran out five miles to Lockport and met the World's Fair tourists as they came in. The tourists were halted and the entire division came in together, and participated in the dinner prepared by the genial host of the Hotel Monroe. More tourists were seated at this meal than at any other noonday stop on the long run.

The roads from Chicago to Joliet were excellent, and the forty miles could be covered easily in two hours. Great enthusiasm was manifested all along this line, and every youngster old enough to wave one was provided with an American flag, with which he saluted the tourists as they passed. The trail of confetti, while not very distinct in the City of Chicago, was readily followed on the country roads. Horses showed considerable fear at the approaching machines, and more than one tourist was obliged to get out and assist in leading some obstinate animal past his car. The Joliet Automobile and Garage Company opened its garage to the visitors, and there were ample facilities for filling on oil, water and gasoline during lunch hour.

Tire troubles cropped out abundantly in Chicago, and the cars that did not pick up at least one nail while running over the city pavements, especially in the down-town districts, were extremely fortunate. We pulled a three-inch wire nail out of one of our rear tires after running a couple of miles with the tire flat. There were ample facilities at the garage of the Chicago Auto-



CADILLAC THAT ROLLED DOWN FIFTEEN FOOT EMBANEMENT NEAR LA PORTE.

Prominent Amateur Tourists, F. N. Manross, and Party in the Columbia.

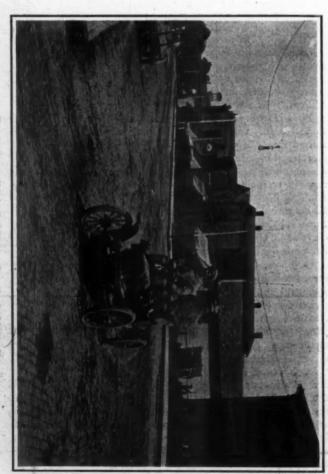
Characteristic Line-Up of the "White Squadron."











SOME OF THE NOTABLE PARTICIPATING CARS THAT ATTRACTED UNIVERSAL ATTENTION IN THE TOUR TO THE WORLD'S FAIR, ENDED AT ST. LOUIS AUGUST 10. The "House on an Automobile"-Peerless Limousine, Entered at Cleveland.

mobile Club for reparing tires, and we were fixed up in good shape within a half hour.

The Chicago police force was unusually lenient when the tourists, after riding hundreds of miles over indifferent roads, eventually rolled in over Michigan boulevard. Who could resist such an opportunity of throwing throttles open and "letting things rip" just for a minute or two? Greycoat after greycoat turned his back as this or that tourist's car sped past traveling twice as fast as the city ordinance allowed. The same leniency was observed as the tourists left Chicago, wending their way out Jackson and Washington boulevards toward Austin avenue.

The following men have registered for the run from Chicago to St. Louis: John Farson, F. C. Donald, F. X. Mudd, W. G. Lloyd, I. V. Edgerton, J. A. Ellis, W. W. Shaw, Chas. R. Judd, Henry J. Ullman, S. J. Turnblad, F. H. Pietsch, S. S. Gorham, W. J. Wilkins, G. J. Scherer, E. H. Pratt, F. A. Bostwick, A. G. Bennett and George A. Crane. L. A. Wood and B. A. Ledy, of St. Paul; George J. Scherer and S. J. Turnblad, of Minneapolis; O. F. Weber, of Milwaukee; E. B. Jackson and W. H. Stepanck, of Cedar Rapids, Iowa, also joined the party in Chicago, arriving in that city on Sunday afternoon.

PERCY F. MEGARGEL.

SUB-POENAED IN TOLEDO.

Surprise Sprung by Local Manufacturers and Club is Hugely Enjoyed.

Special Correspondence.

Toledo, Aug. 4.—The tourists began arriving here shortly after dinner and continued to come in up to 9 p. m. last night. Among the first arrivals were A. L. Pope in Pope-Toledo No. 59, Harold L. Pope, in a Pope-Hartford and H. T. Lesh, in a Pope-Toledo. Mr. Lesh, of Boston, who started from Cleveland at 4 a. m. yesterday morning to scatter confetti at the turns, accompanied by Ralph McClelland, came through splendidly, and reached the Boody House a few minutes after 11 o'clock. C. C. Ferguson and R. H. Magoon, driving a Pope-Toledo, also made a fast trip from Cleveland. They are not officially in the run, but made the day's journey for pleasure.

As it neared I o'clock the committee to record the arrivals, consisting of President Marshall and Dr. Wagar, secretary and treasurer, of the Automobile Club, and Archie Hughes of the Pope-Toledo company, were anxiously awaiting the arrivals of the cars. At 12.55 p. m. a big Panhard, driven by James M. Waters of New York (No. 50), came snorting up to the entrance. Mr. Waters was accompanied by E. P. Gitchell. They left Cleveland at 6 o'clock yesterday morning and completed the journey of 123 miles in six hours 35 minutes. It was a splendid run and the entire journey was made without an accident. From this time to 9 o'clock last evening, the autos came

stringing in, a number reporting slight accidents, but the majority coming through without any mishaps.

As the machines drew up to the Boody House entrance, one of the local police officers, Val Kujawa, was ready with a subpoena reading:

"The United States of America, State of Ohio, City of Toledo, ss.

"The President of the Toledo Automobile

"Greeting: For divers and sundry reasons appearing sufficient to us, we command and strictly enjoin you, that, laying aside all matters whatsoever such as bum spark plugs, flat tires, bad roads or short circuits, notwithstanding any excuse whatever, you be and personally appear at Hanner's Farm, in said City of Toledo, on Wednesday, August third, in the year of our Lord, A. D. 1904, at 8 o'clock p. m., then and there to witness whatever we shall elect to do unto you, the same being respite from police, road and roadside trials and tribulations in the way of a dinner given under the auspices of Ye Toledo Automobile Club by Ye Pope Motor Car Company. And this banquet you may nowise omit under penalty of having your rear tires slit, your gasoline watered, your batteries short-circuited, and what more we shall elect to do to you will be a plenty.

"Witness:

(Seal.) "E. J. Marshall, "President Toledo Automobile Club., C. P. Wagar, Secretary."

Officer Kujawa would ask the driver if he had run over a dog or chicken and naturally would receive a negative answer. He would, however, impress upon the receiver the seriousness of their supposed misdeed and while the recipient was reading the subpoena the crowd, which early had gotten onto the idea, would stand ready to laugh. As soon as the driver saw what it meant he would smile and then everyone would yell. It was a clever idea and made one of the hits of the run.

About 7 o'clock the tourists were taken to "The Farm," where a fine dinner was served by the Pope Motor Car Company, under the auspices of the Toledo Automobile Club.

At the conclusion of the dinner speeches of a short and pertinent nature were delivered, after which the guests adjourned to the theater, where a vaudeville bill was enjoyed.

The club presented maps of the roads within a radius of sixty miles of Toledo to each of the drivers and owners.

All of the machines got away this morning on their way westward about 10 o'clock.

PROGRESS OF KANSAS CITY TOURISTS.

Special Correspondence.

KANSAS CITY, Aug. 8.—E. P. Moriarty and Mr. and Mrs. C. C. Cockerill, of Pittsburg, Kan., started from here on the St. Louis tour Saturday morning in two Stevens-Duryea cars. A number of local mo-

torists accompanied them part of the way on the first day's run, which ended about midnight at Marshall, ninety-three miles, the tourists having been much delayed by the heavy travel on the country roads near Pink Hill, where a political picnic was in progress.

They reached Glasgow, Mo., early Sunday evening. A spring on the car driven by Mr. Cockerill broke just as he was entering the town, but it was quickly repaired and the party got away all shipshape this morning. The worst roads they have yet traversed were those in Jackson County, not far from this city. The Missouri River was crossed at Glasgow. The next stop will be at Mexico, probably about noon. They expect to arrive in St. Louis Wednesday.

THE SCOTT ACCIDENT.

Fatal Collision of Big Baltimore Car with Train Narrowly Averted.

Special Correspondence.

Perrysburg, O., Aug. 5.—R. B. Scott's party in the huge 70-horsepower special touring car No. 14, had an accident here yesterday that wrecked the car and came dangerously near to being one of the worst and most fatal of the railroad grade crossing accidents that have occurred so frequently of late to automobilists.

The party consisting of Charles S. Scott, of Cadez, O.; R. B. Wausson and "Gus" Behrens, of Baltimore, and Charles Benner, of Cleveland, had met with an accident at Cleveland which caused some delay and was endeavoring to make good time to Toledo, where it would take up R. B. Scott, and proceed on the way westward. By a miscalculation they came through Perrysburg and were making rapid progress. The road leading into Perrysburg makes a turn about 200 feet from the railroad crossing, and as the big machine came bowling down the street the C., H. & D. R. R. fast express train was steaming onto the same crossing. The train does not stop here and was therefore making fast time. It was impossible for the driver of the auto to see or hear the approaching train and until within a very short distance of the track he had no warning of his danger. It was then too late, and although Behrens, who was at the wheel, immediately applied the brakes the momentum forced the machine against the train, which it struck just behind the tender. It was then bumped by the trucks of the coaches successively as they passed until the machine was knocked clear of the track.

Just before striking the train Scott jumped and landed about forty feet away unhurt. The others did not have time to jump. Benner was thrown out and struck against the steps of the baggage car and was hurled back against the auto. He immediately jumped up and declared himself unhurt, although he was afterward found to be badly, though not seriously, bruised.

The other two men remained in the automobile and were only severely shaken up.

The front end of the machine, which bore the brunt of the collision, was very badly damaged. The baggage car was badly splintered and the oil-box covers on several of the trucks were torn off.

R. B. Scott immediately came from Toledo and upon viewing the wreck of his elaborate and costly machine, ordered it dismantled and sent to his shops at Cadiz, O., where it will be rebuilt.

The car was a special machine, built at the shops of Sinclair, Scott & Co., in Baltimore, Md., after the Peerless model, with an engine copied after the Mercedes. The machine, when ready for this tour, cost \$12,000.

R. B. Scott, who is chairman of the Baltimore division of the Tour Committee, went on to St. Louis from South Bend, Ind., where he had invitations to join other members of the touring party. Regarding the collision he said: "Both of the driving

TROUBLE ON SOUTHERN ROAD

Cars in Baltimore Division Suffer from Bad Roads and Hills.

Special Correspondence.

ZANESVILLE, O., Aug. 6.—The National Highway division of the A. A. A. St. Louis tour reached this city on schedule time Wednesday. Only four cars were in the party, the fifth entrant, No. 81, a Pope-Toledo driven by W. D. Allison with two passengers, being reported delayed with tire troubles and a damaged frame near Cumberland, Md.

A number of local automobilists drove east on the turnpike to meet the party. The first car to arrive, at 5.30, was No. 66, White steamer, driven by A. M. Hustead, owner, with Mrs. J. M. Hustead and W. B. Hustead as passengers. This entrant joined the division at Uniontown and left Wheeling at 9.30 a. m. Wednesday. Engine troubles were experienced en route and at Cam-



MINNEAPOLIS CONTINGENT.—MESSRS. TURNBLAD AND SHERER, THEIR WIVES AND LILLIAN TURNBLAD.

men are experts and I know the accident was unavoidable. I am certainly sorry it happened but consider the escape of the men extremely fortunate. The car was not being run recklessly, but the approach of the train being hidden, and the crossing not having been prominently marked, nor a warning bell having been heard, I hold the driver hlameless."

FOUR STARTERS FROM TWIN CITIES.

Special Correspondence.

MINNEAPOLIS, Aug. 6.—Minneapolis and St. Paul are not so well represented in the A. A. A. run to St. Louis as had been expected. Only four machines have left the Twin Cities. The Minneapolis participants are Mr. and Mrs. Swan J. Turnblad and daughter Lillian, and Mr. and Mrs. George J. Scherer. The St. Paul starters are L. A. Weeds and B. A. Leddy.

The party left from here Wednesday morning for Chicago, where they will start with the eastern tourists Monday morning. bridge, the noon stop, the crankshaft was discovered to be fractured between the high and low pressure engines. A new engine will be installed at Columbus. In spite of the broken shaft the car pulled through in less than six hours net running time.

The second car in was No. 48, Winton, driven by W. B. Saunders, of Philadelphia, with mechanician. Tire troubles in fitting a new casing, nipping an inner tube and having the work to do over held it up until after noon, so a late start was made from Wheeling. By lunching at a country store on sardines and the thirst-producing cracker enough time was saved to get the car through by 6 o'clock, a very creditable performance when the grades and road surface are considered.

Two machines, Nos. 25 and 26, both White steamers, came in at 9.30 p. m. No. 25 was driven by Hart D. Newman, owner, of New Orleans, with Frank M. Zeigler of the same city and J. Roy Collins, of Norfolk, Va., as passengers. No. 26 was

driven by Sam Stone, Jr., owner, with Palmer Abbott passenger, both of New Orleans. These two entrants left Wheeling at 8.45, but were stopped by a seized bearing twenty miles west. The trouble was in the pinion drive shaft. Six hours were lost in taking down the differential and making the necessary repairs. A pleasing (?) incident of the stop was a two-mile jaunt 'cross country to a blacksmith shop for a heavy vise.

Storage was provided for the four machines at Fritz Bros.' garage, where gasoline and supplies were taken aboard Thursday morning.

The first car to get away was No. 48 at 9.30 a. m., with No. 66 following in half an hour. Nos. 25 and 26 were piloted out of town at 11:30 a. m.

The road between Zanesville and Columbus is in bad condition, owing to heavy rains and subsequent neglect, large patches of loose stone and sandstone boulders being exposed, and but few good stretches exist in the entire stage from here to the state capital.

Chas. A. Davis and A. E. Vinton, of the G & J Tire Co., are in the party, making the various stages by train and looking after the comfort of the tourists at night stops.

SOUTHERN SECTION BANQUETED. Special Correspondence.

COLUMBUS, Ohio, Aug. 6.—The eastern motorists en route to St. Louis over the National Pike arrived in this city Thursday, as scheduled, and were taken in charge by the Columbus Automobile Association and given a good time. In the evening a banquet was served at the Chittenden. The first car to arrive was driven by Hartley Newman, of Norfolk, Va., and with him were Frank Zeigler and Roy Collins.

"We had a good run, but a tough time," said Newman. "Our worst troubles were in crossing the Cumberland Mountains. It was like running up the side of a house. After crossing the ridge we found power unnecessary, but it was difficult to retard momentum. The descent was so steep that we had to get farmers to cut logs and tie them to our machines."

The party remained here over night, resuming their journey Friday morning. It was reinforced by four Columbus machines. One was the 24-horsepower Stearns of William Monypenny, and carried besides himself and his machinist, Mrs. Monypenny, Miss Ethel Monypenny and Miss Eleanor Bryne. The other machines were the big Buckeye 4-cylinder, air cooled, 20-horsepower touring car designed by L. A. Frayer, of this city, and ridden by him; Imperial runabout, built in Columbus, and carrying A. D. Rogers and T. Tom Piccard, and another Imperial carrying Charles O. Howard.

Springfield, the first stop after Columbus, a distance of 48 miles, was reached in I hour 38 minutes, Frayer's car leading the party.

On the Trail of Confetti.

Fifty-Odd Touring Parties Enjoy Good Traveling Over Macadam and Gravel Roads of Northern Ohio and Indiana.

Special Correspondence.

T OLEDO, Aug. 4.—The run into Cleveland was marked by a lively contest between the White "string" and the Royal Tourist entered by A. D. MacLachlan. It was understood that the cars made in any city passed through were to have the privilege of entering their home town first, but neither of the two Cleveland makes was willing to give first place to the other. The result was that the Whites started about 10.30 p. m., and made a leisurely run, meeting Rollin White at Willoughby and getting to the Hollenden, with no effort at haste, about 4.30 or 5 o'clock. They came near losing the honor of first entry by their lack of haste, for Mr. MacLachlan, who started at midnight and did his best to overtake them, actually did so just as they reached the Hollenden, so that honors were even after all.

The party leaving Erie numbered twentysix cars not one car having withdrawn because of permanent disablement. At Cleve land the party was swelled by a number of new entries, as given in the accompanying list, which includes all the new entries received up to that time. Apparently fully 100 cars will leave Chicago next Monday morning.

The roads between Erie and Cleveland were pronounced by all the tourists fine, with the exception of those entering Cleveland, which were reported the worst, in fact, of the run. They were dry, but they were full of chuck holes a foot or two feet deep. Almost equally bad roads were traversed when leaving Cleveland.

The country between Cleveland and Toledo is nearly level, with occasional woods still uncleared. Grain and corn are the commonest crops, but orchards and truck gardens are also common. The roads in general are dirt, with no stone foundation, and therefore dependent in condition almost altogether on the weather and amount of usage. Of the particular roads traveled by the tourists, those through Elyria and Birmingham to Norwalk were dirt; and from Norwalk through Clyde, and Fremont to Stony Ridge. Nine miles from Toledo, a state macadam road eight or ten years old, is followed. This road is in such poor condition that for long distances the tourists preferred the dirt track at the side.

From Stony Ridge to Toledo is a new macadam road, equal to the best we have yet traveled on. It has been built very recently under a new state aid law quite similar in some respects to New York's. Under this law the abutting property owners on an improved road are assessed more or less according to their distance from the road, up to a total of fifteen per cent. of the whole cost of improvement; the county

pays thirty-five per cent. and the state the remaining fifty per cent. of the cost. The expectation appears to be that the abutting property owners will be able in many cases to make good their contributions by getting contracts for all or certain portions of the work.

In Toledo the tourists were the victims of a genial practical joke devised by the Toledo Automboile Club, under whose auspices the Pope Motor Car Co. gave them a dinner and theatre party at "The Farm," a resort about two miles out of the city. As each car drew up before the Boody House, its occupants were severally served with invitations drawn, folded and sealed in the form of subpœnas. These formidablelooking documents were handed out by policemen, and there were few of the visitors who received them without guilty trepidation, which changed to laughter when they had recovered sufficiently to peruse them. At least one man, on being informed by the officer that he "had a warrant for him," immediately made ready to accompany the "cop" to the police station, without even looking inside the "warrant;" and Mr. Glidden at first refused to receive his, claiming

The dinner itself, arrangements for which had been superintended by Mr. Lehman of

the Pope Company, was both excellent and substantial. It was served in the bowling alley, which just sufficed to seat the party, and after the good things on the menu had been dispatched a good-humored and slightly noisy crowd filled a block of reserved seats in an open-air theatre adjoining, and lent efficient moral and vocal support to a bill of vaudeville.

But one accident of consequence was reported on the Toledo run. E. H. Wallace, driving Rambler car No. 40, was descending a hill at good speed near North Amherst, when he struck a patch of loose sand near the foot, and the car slewed around and overturned. Mrs. Wallace, who was with him, was thrown some distance, but was not injured. The car was righted with the aid of the men in the White string, which arrived most opportunely; and it appeared to have suffered no injury. Both Mr. and Mrs. Wallace finished the journey in the car, after a couple of hours' rest in Norwalk.

A good deal of indignation was excited among the tourists by flagrant overcharging at two of the garages, the Toledo Motor Car Co. and the Kirk-Hall Co., both of which raised their rates on everything except oil and gasoline. As they gave no notice of their intention until the bills were made out, there was nothing to do except to pay under protest. It was the first time that the tourists had been "held up;" and Albert L. Pope expressed himself as greatly disturbed that it should have occurred in his company's home city, and said that he would do his best to have the matter rectified.

An interesting feature of the country

Participants.

Entries Received Between Albany and Cleveland.

9	Peerless Limousine
	Packard E. T. Fetch, Erie, Pa.
63	Winton S. S. Gorham, Chicago.
64	Covert Harold Hoag, Lockport, N. Y.
65	Winton H. P. Dyer, Cleveland.
66	White Steamer
67	Peerless
68	Stearns 24 I. V. Edgerton, Chicago.
69	Apperson
70	KnoxSwan J. Turnblad, Minneapolis.
71	Austin
72	AutocarF. H. Pitsch, Chicago.
73	Pope-Toledo
74	KnoxG. J. Scherer, Minneapolis.
75	Marion
76	Withdrawn.
77	Phelps F. W. Richards, of Boston; Mrs. Richards
	and Walter Killam, engineer.
78	WintonL. A. Wood, St. Paul.
79	Rambler
81	Pope-Toledo
86	OldsmobileW. J. Wilkins, Chicago.
87	Winton George T. Thompson, Onondaga, N. Y.
88	Franklin
IOI	Pope-Toledo
102	Pope-Toledo O. F. Weber, Milwaukee, Wis.
103	
104	
105	Peerless Limousine Collings, Cleveland, O.
-	

about Fremont, Ohio, is the considerable number of oil wells there seen. These wells are not now "gushers," if they ever were. They are connected by pipes of about two-inch size, sometimes eight or ten wells being pumped by a single engine. Several of the tourists who were not in a hurry stopped in this region and inspected the wells before going on.

Upon arriving at the hotel after the "show," each driver of a car was given a large blue-print map of the roads from Toledo to South Bend, Ind., compiled by W. M. Morrison, of Bryan, O., who drove the pilot car between those cities. The map was admirably laid out, with every landmark of importance clearly indicated.

Toledo to South Bend.

SOUTH BEND, Ind., Aug. 5 .- As Waterloo is only a small town, and as the roads were in good condition, about half of the tourists determined to go straight through to South Bend and lie over a day. This proved to be an excellent arrangement, and, in spite of the length of the run-about 170 milesthe cars began to reach South Bend before 2 o'clock. The fastest run was made by James L. Breese, who reported the running time of his 40-horsepower Mercedes as six hours ten minutes. For the last seventy-six miles he gave his time as two hours ten minutes, the roads improving towards South Bend. Webb Jay made a fast run in seven hours twenty minutes, being the first to arrive, and Berchwood, in the Haynes-Apperson, reported an average speed of twenty miles an hour from Toledo to Waterloo, including ten miles of bad macadam out of Toledo.

The others to double up on the schedule were Messrs. Johnston, Post, Glidden,

are certainly very different in many ways from those of the East.

Beyond Toledo the tourist gets a taste of the true Western prairie. A few low hills are met with, but for miles and miles only gentle undulations and occasional groves of trees enable one to say that the country is not absolutely level. From the Air Line Junction in Toledo to Butler, Ind., seventy miles, the Air Line branch of the Lake Shore runs as straight as a string between fields of wheat and corn in almost unbroken succession. The roads are laid out on section lines, east to west and north to south, giving the driver an uninterrupted view, sometimes for a mile or two, before a slight bend or undulation of the surface breaks it, so that the speed possible is limited only by the power of the motor. From Toledo to South Bend the course is slightly south of west, and in many places the road lies almost parallel with the railroad. At one such place Mr. Glidden managed to keep up with the Lake Shore Limited for nearly half a mile before a rough place in the road obliged him to slow down.

The larger number of the through highways of northern Indiana, as well as many of the Ohio roads west of Toledo, are gravel roads, the material for which is found in the numerous gravel beds scattered through the State. The gravel in its natural state is mixed with a considerable quantity of sand, and this is spread on the earth road. No stone foundation is made, and the virgin soil beneath the gravel may be clay, black loam, or occasionally sand. Though the loam predominates, there is a great deal of clay, and this in time works up through the gravel, producing a muddy surface, necessitating fresh applications of gravel.

As neither the gravel nor the sand makes mud, the gravel road will stand a deal the last rain hereabouts, but the gravel sends up enough dust already to give the roads a close semblance of dirt roads. Indeed, of the two the dirt road is distinctly the firmer when both are perfectly dry.

An agreeable feature of both dirt and gravel roads is the absence of "chuck holes."



WHY THE PEERLESS TURNED OUT.

These interesting affairs seem to belong peculiarly to "improved" roads which have fallen out of repair. The natural dirt road is almost wholly free from them, and the gravel road nearly so.

The occupants of none of the cars arriving in South Bend reported trouble of consequence, but James L. Breese appears to have had a close squeak to being smashed up by an express train. He was going at high speed through Goshen, and failed to make a right turn which would have brought him parallel with the railroad without crossing it. When close to the tracks he heard the train, and jammed on his brakes. His car slid in the loose dust, and he had to slacken the brakes, but he fortunately was able to stop with a foot or two to spare, just as the train roared by. Earlier in the day he had taken another right turn at a speed which tore off a front tire and caused the two other men with him to either jump or to be thrown irom the car.

The Peerless limousine cars seem to have made a decided hit with the local population along the route of the tour. The idea of a closed automobile seems to be entirely new in most quarters, and this practical demonstration of its capabilities appears to have done much to stimulate popular interest among those seeing it.

South Bend to Chicago.

CHICAGO, Aug. 7.—Between South Bend and Chicago the writer had his first road trial of the St. Louis single cylinder runabout. This little Old Reliable had two forward speed changes by sliding gears, weighed about 1,300 pounds and was rated at 9 horsepower. It was piloted by "Charley" Root, and, while by no means a fast machine—its maximum speed on the level being about twenty-five miles an hour—it managed to demonstrate very well that speed is not everything, for it passed on the road several cars which were a lot faster



LIFT BRIDGE OVER ERIE CANAL NEAR ROCHESTER ON TOUR ROUTE.

Waite, Lowe, Esselstyn, Waters, Huss, A. L. Pope, MacLachlan, Fatch, Page, and Collings. Fatch is driving a Packard from Erie, and Collings, another recent entry, drives a Peerless limousine. Nearly all heartily praised the Indiana roads, which

of wetting and be the better for it; but in prolonged dry weather it gradually disintegrates; the sand no longer binds the stones, but works up in a fine dust, which is raised in clouds by every vehicle and pedestrian. It is only about ten days since when they were going, but which had to stop for tire and other troubles.

For several miles out of South Bend we had gravel roads, but not of the admirable sort described in the preceding letter. These were very rough, with numerous hollows lying across the road, rather than ruts, and were sandy where they were not bumpy. In spots fresh gravel had been piled on, but not spread.

For a number of miles each side of La Porte the roads were pure, unadulterated sand. The soil of all that territory is sand, with a little clay in spots, and a thin surface of loam a few inches deep. The roads generally have deep ditches on each side, the sand being thrown up into a narrow causeway in the center. The country is rolling, with a constant succession of small hills, and the roads are winding instead of straight.

The net result of these characteristics, where the roads are not graveled or macadamized, is a crooked, rough, and very treacherous sand track, which it is equally difficult and dangerous to negotiate at speed.

The horses met in this part of the country were more disposed to be skittish than those farther east, but most of their drivers seemed determined to make short work of their timidity, for they were prepared to hold their beasts in hand till the last machine had gone by. I saw several short but sharp struggles between horse and driver, but no runaways. I learned, however, that one young woman, driving in person, had let her horse bolt and smash the buggy. She was taken to a doctor by the man whose car had caused the trouble; but she appeared to be suffering more from shock than from bodily harm.

Beyond Valparaiso-the nominal but mostly neglected noon stop-a very good limestone macadam road is found, on which fast time can be made, limited only by the extreme sharpness of most of the turns in the roads, which here and again follow the rectangular layout. It takes the Easterner some time to get used to this feature, and I was not greatly surprised, though certainly shocked, on approaching one of these sharp corners, to see a Winton touring car upside down just beyond the outer side of the turn. This accident was plainly due to downright recklessness, for no driver attending to business could have failed to see that the turn was there. It was learned later that the pilot car behind us ran out of conjetti in the latter part of the run, and resorted to beans and corn as the most convenient substitute, with the natural result that chickens were killed in scores by the following cars.

The official route card proved nearly worthless on this day's run; and as the pilot car with the confetti did not start till after we did, we had little except Mr. Root's recollection of the road—from a night trip two days before—to guide us. We departed altogether from the official route into Chi-

cago, going in via South Chicago, by a very crooked but a short route through a villainous neighborhood.

We reached Jackson Park in time for a sandwich lunch at the German Building, our time having been 5 1-2 hours from stop to stop. At 3.30 p. m., the stragglers having arrived and a swarm of spick and span local automobilists having descended on the dusty tourists, the city was entered via Washington Park and Michigan Boulevard in parade order. In two respects the parade was a success: it was witnessed by a great throng of people, especially in Jackson Park; and the number of participating cars was certainly impressive.

Chicago to Pontiac.

Pontiac, Aug. 8.—The Chicago Automobile Club showed its good will to the tourists in many ways, but in none more acceptably than in the preparation of a good road book with map, showing the route from South Bend through Chicago to St. Louis. This little book was compiled by F. E. Wheeler, of Janesville, Wis., and copies were distributed gratis to all the tourists. It does not wholly dispense with the need of confetti, but it is far ahead of the official route cards.

That the pleasures of an automobile ride on dirt roads depend a great deal on when it last rained has again been proved, for to-day's ride, which, we have been told, would be the most strenuous of the tour, has been one of the most delightful. All of it after the first twenty miles has been on dirt roads pure and simple; but these have nearly all been of black loam, which has been worn smooth by travel and yet is only moderately dusty. From Chicago we have had fine macadam out to the Joliet Road, then fine gravel, as different as possible from that of Saturday; and after this came the dirt, at first loose and sandy, with pebble roads in places, which we sometimes drove on and sometimes skirted. These pebble roads resembled those of the Mohawk Valley, but the dirt, being sandy, did not lubricate the pebbles, and a very good surface resulted. Where the black loam began the pebble roads ceased.

Added to the roads and the weather, the writer had an especial cause for pleasure in being a passenger with "Tom" Fetch, of "Old Pacific" fame, on the four-cylinder Packard car No. 13, which will go to St. Louis. Fetch is not out for a speed record—a fact he proved early in the morning by stopping his car to light cigars. The tonneau rides as nearly like a rocking chair as a tonneau car can; and the smooth, even spinning off of the miles on the straight level roads beyond Joliet, at a steady pace of about twenty miles an hour, was nothing if not delicious. It seemed actually restful, and probably was.

Until we got beyond Joliet and away from the Illinois River the country was rolling. The farmers with their families were out in force to see us go by, and

some of the rural lassies were very comely. All greeted us with good will and some with proffers of apples.

For a few miles beyond Joliet, where we lunched in company with Mr. Whipple and an escorting Packard driven by F. J. Pardee, of Chicago, we followed the river and the drainage canal, and the scenery reminded me much of some bits of the Mohawk Valley near Herkimer. Beyond Morris we left the river and turned south, and the level country began. For miles the road ran with gentle undulations between fields of oats and corn and pasture land, the dirt track winding between straight fences true to the compass, and Fetch had nothing to do but to toy gently with the steering wheel and occasionally shift the spark or throttle.

At one farm about midday between Morris and Dwight, where a considerable party had gathered to see the machines go by, we stopped and all hands-there were four of us-gave up our seats to some uncommonly pretty girls. Then Fetch gave them a ride up the road, and we took our leave amid a round of cheers from their brothers and parents. We learned later that at least one other tourist stopped and photographed and gave a ride to the same party, and that he and his driver and the occupants of some half-dozen other cars also, which came along about that time, were rewarded with cake ad lib., for their gallantry, It will be long before we cease to grieve over the cake we didn't get.

We had passed a number of cars on the road, some in motion and others temporarily stopped by tire and other minor troubles of the sort which every seasoned tourist accepts as a matter of course. One and all, to Fetch's invariable hail, "Have you everything you want?" replied in the affirmative; but now our own time was to come. Seven miles out of Pontiac the right rear tire burst. It was the first tire trouble experienced with any car which the writer had ridden in on the tour. Apparently the rim had been a bit rough, and had chafed the casing. A tire burst seemed not to have been among the things Fetch expected, for he carried no spare casing; and we crept slowly into Pontiac on the

Here we have found the whole town it is not a big one—en fete to greet us. The one hotel is more than full, and a number of private boarding houses have received the overflow. Everywhere are evidences of hospitality and friendly interest; and, best of all, there is no disposition to "hold up" the visitors.

Among the incidents reported by other tourists, one related by R. H. Johnston, of the Peerless limousine No. 9, is interesting. Mr. Johnston's car had the ill luck to puncture a tire a few miles from Joliet, and the casing was too large for the rim, necessitating a couple of hours' disagreeable work in getting it into place. The car had stopped opposite a farmhouse,

Plans for St. Louis Reception.

Staff Correspondent.

the owner of which came out while they were at work, and, wonder of wonders, offered them real tire tools, including some they did not carry, and personally assisted them to subdue the refractory casing. He offered them the use of his house telephone if they needed help from town—which they did not—and when the job was done he insisted on their taking dinner with his family. He was an up-to-date farmer, that was all; he owned a Cadillac and had a complete home workshop, besides a telephone and other modern conveniences that made his guests open their eyes.

Shortly after midnight, while the above lines were being penned, the most exciting event of the whole tour occurred. Most of the cars had been stored for the night in the yard adjoining Bunn's livery stable, but four were indoors-F. A. Benson's Oldsmobile, Fetch's Packard, Esselstyn's Franklin and Seaton's Buckmobile. The first two were in a repair shop attached to the stable and under the office of a local paper, and the other two were next door, the Franklin having been transferred after 11 o'clock. The Oldsmobile was undergoing repairs, and the local mechanic assigned to the job finding that the incandescent drop light cord was too short to reach under the car, detached one of the oil lamps of the car and set it beneath. Then, by mistake, he opened the drainage tap from the gasoline tanks. The inevitable followed.

The blaze spread so quickly that there was no time to shut off the gasoline or even roll the car out of the building, a small two-story frame structure. Fetch and some friends fortunately were downstairs in the hotel, which is directly across the street. from the stable, and on hearing the alarm they dashed out, burst in the main door, which was locked, and dragged the Packard out to safety. Before the fire company—a very efficient one—could respond to the alarm, the gasoline tank of the burning car had exploded with a report that shook the hotel, and in an instant the whole building seemed ablaze.

Visions of a devastated business block and a mourning Pontiac arose before the mind's eye; but when the firemen got to work the flames were subdued almost as quickly as they had spread. Fifteen minutes, at most, from the time of the explosion, the building was a blackened, smouldering shell; and the surrounding structures were safe. The tour will be minus one car, and Pontiac will have lost one print shop and acquired very likely a complicated dispute with some insurance company.

HERBERT L. TOWLE.

No automobile tool-box should be without a supply of copper wire of two or three different sizes.

Automobiles are becoming such a common sight in the village that the horses refuse to be scared and the small boys fail to follow half a mile.—Barrington (Ill.) Review.

St. Louis., Aug. 9.—The World's Fair city is going to do herself proud in the splendid reception which is planned for the tourists when they arrive at the end of the record-breaking journey. Under the direction of A. B. Lambert, President of the St. Louis Automobile Club, who has developed splendid qualities of leadership, the program, extending over three days, has been completed.

The main body of tourists that come by way of Chicago is expected to reach the city limits to-morrow, Wednesday, evening. Today a reception committee of St. Louisans, including Dr. E.M. Senseney, Harry Turner, O. L. Halsey, W. W. Leathers and Jesse French left for Springfield, Ill., where they will give the tourists friendly warning of what they may expect when they reach the journey's end. To-morrow afternoon another committee will start out in machines to meet the cavalcade at Edwardsville. This will be headed by President A. B. Lambert of the St. Louis A. C., and will include Messrs. Walker, Culver, Gardner, Schlusser and Fest. Besides the official representatives of the club there will be many local motorists with their cars in the party. From the famous Eads bridge, over which the procession of tourists and locals will pass to reach the city proper, the route will be through the business district to the magnificent Hotel Jefferson, which will be headquarters for the tourists during the stay in St. Louis.

Wednesday night and the greater part of Thursday will be a period of rest, and Thursday night there will be a smoker in the Washington Hotel in honor of the visitors. This will be really an experience meeting in which the troubles and pleasures of the trip will be narrated, and those lucky enough to be with the crowd will get some sure-enough pointers about touring.

On Friday the chief feature of the program will be the grand parade of automobiles at the Fair. Friday is Automobile Day, and not only will the tourists and their local friends be in line, but many machines from the surrounding country are expected, and as it is Automobile Day at the Fair it is probable that many of the exhibits will be in the running. In front of the Jefferson Hotel on Twelfth street the machines will be lined up for the start on Friday afternoon. Led by the travel-stained cars of the tourists, the procession will give the natives a five-mile demonstration run to the grounds. Inside the fence the course will be laid along the principal drives, where neither mud nor thank-you-ma'am's are found, until the Administration Building is reached, where President Francis, of the Exposition, will head the parade. With him in a Pierce Arrow will be Director of Exhibits Skiff and Willard A. Smith, Chief of the Department of Transportation Exhibits. At the Government Building they will turn out of the line and all the other cars will pass in review. The Missouri division will lead the run past, with Mayor Rolla Wells of St. Louis in front.

Already some of the odd tourists have come to town. The advance guard of those who took the Southern route reached here about 7:30 o'clock last night, and put up at the Jefferson Hotel. In this "bunch" were A. D. Rogers, Jr., Sterling Rogers, T. W. Pinkard and C. O. Howard, all of Columbus, Ohio. They left last Friday and came through in their two cars in about twenty-five hours' actual running time. On the way from Columbus to Terre Haute the roads were excellent, but in Illinois the roads were invariably bad and the going heavy. An odd incident on the way was the passage through a grove, where a barbecue and picnic of country folk was under way. Several hundred horses, it seemed to the tourists, were hitched to fence rails and branches, and every one showed a wild desire for freedom when the autos came along. Some of the natives had apparently never seen a car before, as they were more scared than the beasts. However, no mis-

First to arrive over the Northern route were Mr. and Mrs. Walden Shaw of Chicago, who got in here at 6 o'clock Monday evening, making the run down from the Windy City in about eighteen hours.

THE LONG TOUR ENDS.

Tourists Reach Destination After Weary Day of Mud Plugging.

Special Correspondence.

St. Louis., Aug. 10 .- The New York-St. Louis automobile tourists arrived here today after a hard struggle with almost impassable mud from Springfield, Ill., the last stopping place before St. Louis. The cars were strung out in a long procession, and on the hills it was the rule for all hands to get out and push, owing to the greasy surface. The forty-two miles between Mount Olive and East St. Louis proved to be almost the undoing of many of the automobiles. A number of St. Louis automobilists met the tourists at Edwardsville, Ill., and escorted them to East St. Louis, where they were greeted by a cheering crowd as they rolled toward the Fair grounds on the last stretch of their long journey. Reports of mishaps to Ray D. Lillibridge's White and Harlan W. Whipple's Mercedes have been received, but none of the occupants was injured. Mr. Whipple made the last few miles of the journey by train. It is expected that practically all of the cars will come in later, some having been delayed by minor troubles directly attributable to the bad roads.

Suggestions to the Inexperienced. -VII.*

A Simple Discussion of the Principles of the Gasoline Car for the Benefit of Novices.

By A. D. RIVER.

SLIDING GEAR SPEED-CHANGING SYSTEM.

THE system of speed-changing gears employed on nearly all of the European cars, and on most of the higher powered American machines as well, is that known as the "sliding gear" train. On one of two parallel shafts is fixed a set of gears three or four in number, of different sizes. On the other shaft is a corresponding set, united together and free to slide along the shaft, but not to rotate on it, being held either by keys or by that portion of the shaft being squared. These gears are of such sizes and so spaced as to mesh, each with one of the gears on the other shaft, and to mesh one at a time only. Consequently, by shifting the movable set along so that one or another pair of gears is in mesh, the velocity of the driven shaft relatively to that of the driving may be changed.

To avoid smashing the gear teeth, which would inevitably result if one attempted a shift of gears while running with one shaft connected to the road wheels and the other to the motor, the shaft connected to the motor is momentarily released, by means of a friction clutch between it and the motor, and allowed to turn loosely till the change of gears is accomplished, after which the friction clutch is re-engaged. Even then, however, there is an unavoidable

has seceured on it four hardened steel pinions C, D, E, and F. On shaft G, which is squared between the bearings, is a sliding "carriage" to which are attached three gears H, I, J. Gears E and I, which are seen in mesh, impart the slowest or first speed to G. D, and I, the intermediate speed; and C H the third speed, which

carrying at its end a fork attaching to a split thrust ring N working loosely in a groove in the carriage.

The arrangement of gears just described requires that the power shall always be transmitted through one pair of gears. As most of the driving, except in a very hilly country, is done on the high gear, some makers consider it better to make the drive direct on that gear, even at the expense of driving through two pairs of gears instead of one on the lower speeds.

An arrangement of this sort is seen in Fig. 2. Here the loose jaw coupling, of which A forms a portion, constitutes the connection to the flywheel clutch. Part A

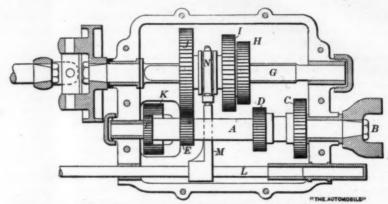


FIG. 2.—ARRANGEMENT OF GEARS FOR DRIVING DIRECT ON HIGH SPEED.

in this case is the highest. The gears are so spaced that any pair is fully released from mesh before the next is engaged. To obtain the reverse motion, gear J is shifted past E into mesh with an intermediate pinion K wide enough to mesh also with F.

is formed integral with a short thick shaft, or rather sleeve, which turns in the bronze bushing B and has fixed on it the pinion C, back from which project the claw clutch teeth D. Like all of the other shaft bearings seen, B is slotted on top and an oil ring in the slot rests on the shaft and is carried around by the latter, dipping into an oil well below, and carrying the oil as it turns to the shaft above.

The left-hand (or, in the car, the front) end of the squared shaft E turns freely in the sleeve to which C is attached, and on it slides a carriage to which are attached the two gears F and G. On the "jackshaft" H are secured four gears, the first of which I is in permanent mesh with C, so that H constantly turns when the clutch is in. For the first or lowest speed the carriage is moved by the shifter rod and fork I so that gear G meshes with pinion K. For the intermediate speed F is engaged with L. For the high speed or "direct drive," the carriage is moved to the left till the claw teeth D enter corresponding recesses in the end of the carriage, thus locking the shaft E to the driving sleeve. In this position only the gears C and I are in mesh. For the reverse, the carriage is shifted through the first speed till G engages an intermediate pinion M on the stud below pinion N on the shaft. As N is smaller than K, G does not touch it. Drum O is the service brake drum, similar to the corresponding drum on the rear end of shaft G, Fig. 1, and P is a sleeve surrounding a universal joint from which the power is transmitted.

The most characteristic thing about the

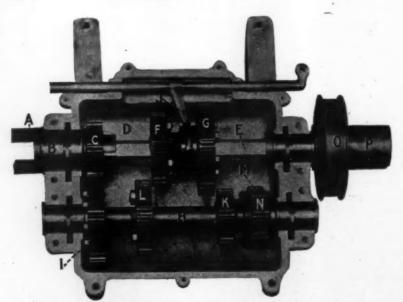


FIG. 1 -TYPICAL ARRANGEMENT OF SLIDING CHANGE SPEED [GEARS.

shock, which it requires the very best of material in the gears to withstand.

A typical arrangement of sliding gears is shown in sketch form in Fig. 1. The shaft A is driven from the motor through a friction clutch coupled to the end B, and **Continued from Page 117, issue f July 30, 1904.

As C and H are of the same size, G turns in the high gear at the same speed as A. In the low gear the relative sizes are such that G turns at about 3-10 the speed of A.

To shift the gears, a sliding rod L is provided from which an arm M extends,

sliding gear system is the necessity of adequate provision for the battering to which the teeth are subjected by every shift of gears. Not only are the gears subjected to rough usage, but they are generally made as small as is compatible with safety, both to save weight in general and because this very feature of small size and light weight reduces the shocks on shifting, which shocks of course are due wholly to the inertia of the gears, the idle shaft, and the portion of the flywheel clutch connected thereto. Consequently the gears must be tough, not brittle, and at the same time have a very hard surface on the teeth to withstand the wear of travel and the shocks of changing speed. These qualities have been combined by the use of either a very mild steel or Lowmoor iron, rendered almost glass-hard to the depth of about 1-32 inch by casehardening after they are cut.

As a gear tooth will sometimes break, and as the gears as a whole wear out (and are expected to wear out) rather rapidly, they are nearly always made separate from the shaft or carriage, so that they may be cheaply replaced. This is clearly shown in Fig. 2.

Another point of considerable importance with this system is that of lubrication. The gears run in a bath of thick oil, but even with the best attention to this point the wear they suffer results in the production of fine metal dust, most of which settles to the bottom of the case, if the latter is deep enough to permit settling under the gears. The dust does not always settle, however, and if the shaft bearings are oiled from the interior splash a certain amount of this dust will get into the bearings and "cut" them. Probably the best plan is to separate the lubrication of the shaft bearings wholly from that of the interior of the case, and this is done in the illustration last shown, in which each bearing has a separate pocket in case and a ring or chain oiler. Another device by which the same result is obtained is to feed oil directly to the shaft bearings from a pressure oiler, and let it escape slowly from the ends of the bearing into the interior of the case.

When the shaft bearings are oiled from the interior splash, a very fine wire gauze screen is frequently used over each pocket, to strain the oil before it goes down to the hearings. If this is not done, a fairly deep case, not too thick oil, and periodic renewal of the bath before it gets too thick with dust, are the best protectives of the bearings.

(To be Continued)

Light Without Matches.

When automobiling, if matches cannot be had, and a light is wanted, it may be obtained in this way: If the car is fitted with jump spark ignition, disconnect one of the high tension wires from its plug; place the free end of this wire in such a position that it lays about a quarter of an

inch away from the cylinder casting. A small piece of cotton waste or a piece of paper should now be saturated with gasoline and placed over the free end of the ignition wire. Turn on the ignition switch and crank the motor. When the spark jumps from the free end of the disconnected wire to the cylinder casting, it will set the paper or waste on fire.

Be careful not to allow the blazing waste or paper to fall into the "apron," underneath the motor, if one is used. This "apron" is usually covered with grease and oil, and if it catches fire it may imperil the car.

On machines having make and break ignition one wire should be disconnected from the insulated electrode in the cylinder. A piece of waste or paper saturated with gasoline, as previously described, is then laid on the cylinder head. The motor is next started and allowed to run slowly—on three cylinders. If the wire which has been disconnected from the sparker, as described, is now touched on and then removed from the cylinder casting or masse close to the waste, the spark resulting from the short-circuit will ignite the waste or paper.

Worn Valve Gear.

An unexpected cause of motors missing and not giving off full power is due sometimes to faulty action of the exhaust valves. This is caused by wear in the valve actuating mechanism. The rollers, or shoes, which ride on the cams of the half-time shaft or the cams themselves may wear, owing to defective lubrication, or to the material of which they are made being too soft. If the amount of wear is, say, one-eighth of an inch, it is clear that the valve will open just this much too late, and close this much too early.

Back pressure will be caused by late opening, particularly at high speeds, and the burned gases will be retained in the cylinder by early closing, and will be compressed toward the end of the exhaust stroke. When the inlet valve opens, therefore, these burned gases, which are then under pressure, will rush out into the inlet pipe, and displace a portion of the incoming charge. Now the piston goes out on the suction stroke, and as the inlet pipe is full of exhaust gas, the fresh gas will not reach the cylinder until the piston has moved out a considerable percentage of its stroke. Consequently the volume of the aspirated charge will be less, and the percentage of burned gas to fresh, or explosive, gas will be greater. This will cause weak explosions and loss of power.

A little consideration will show that if the exhaust valves act as described, it will be almost impossible to throttle the motor, so as to make it run slowly. When the motor is throttled very much only a small quantity of explosive gas is taken in during each suction stroke. There is, as just shown, a relatively large volume of burned gas in the cylinder and passages. This burned

gas may dilute the fresh gas to such an extent as to render the resulting mixture non-explosive.

When there is a greater distance between the "push-rod" and valve stem than 1-16 inch the valve actuating gear should be taken apart and refitted. More clearance must be allowed between the rod and valve stem when the latter is long than when it is short. The reason is, that a long valve stem lengthens more on being heated than a short stem. For this reason before testing the clearance between the stems and rods, one should make sure that the motor is thoroughly heated by running it for ten or fifteen minutes. This run ought to get the valve stems up to working temperature.

When fitting a new exhaust valve—especially if it has a long stem, and everything cold—be careful not to make this clearance too little. If too little clearance is allowed when the parts are cold, the expansion due to the working heat may be sufficient to lengthen the valve stem so much that it will rest on the end of the push rod, and so prevent the valve from seating fully. This will, of course, result in great loss of power also.

Often a motor will have good compression when cold, or slightly heated, and have next to none at all after it has run for some time. When a motor acts in this way, the trouble is usually due to leakage past the valves on account of the small amount of clearance between the valve stems and the push-rods. When the stems and valves are cold, the latter seat properly, but when the stems are heated, and of course expanded, the valves are prevented from seating by the stems resting on the push-rods.

Valve seats which are pitted badly are usually faced off. So much metal may be taken off in doing this that the stem of the valve—when the latter rests on the re-made seat—will touch the push-rod. After valves have been ground in a great deal, or after they have been faced off, the stems may also strike the push-rods. The action of mechanically operated inlet valves will be affected by wear in the mechanism, the same as exhaust valves.

Inasmuch as the springs on the inlet valves are usually weaker than on the exhaust valves, the wear on the parts which move them will not be so great. Another reason why the wear is less that there is no pressure on the inlet valves at the instant when they are lifted, while the exhaust valves may have forty or more pounds pressure to the square inch on them at this moment.

Inlet valves do not get nearly as hot, and consequently do not expand as much as exhaust valves. For this reason less clearance should be allowed between the stems and push-rods than would be allowed between the stems and push-rods of exhaust valves.

The remarks about facing off the seats or valves and grinding in of exhaust valves apply to inlet valves also.

Ardennes Circuit a Hard-Fought Race.

Special Correspondence.

PARIS, Aug. 1.—The grand automobile sport which Belgium has been giving us for the past two weeks is now over. The great speed records have been broken and we have seen the greatest road race ever held. All are satisfied that nothing better could be done, and that nothing ever showed the perfection of the automobile better than the events of the fortnight.

The record breaking at Ostend requires no comment, since such races do not present any peculiarities, so short is the time between their beginning and end. Such performances leave only an astonished and incredulous feeling in the mind of the witness that men can stand such strains, if there is time to feel a strain at such tremendous speeds, and one is left to wonder which should be admired most, the man who attains to this speed or of the delicate mechanism which with so much power tears through the air, obedient to her driver's least notion.

Not less admirable than these wonderful bursts of speed were the performances in the long road races which followed.

Taking them chronologically, on Sunday the motorcycle and the light voiturette races were held. How a man was able to stand 240 kilometers of rather poor roads on a bicycle weighing less than 105 pounds at an average speed of more than a kilometer (62-100 of a mile) a minute is almost incomprehensible, but such was the performance of Kuhling, on a Minerva (Belgian), who covered the 149 miles in 3:46:06 4-5, winning first place, and of Griet on an Alcyon (French), who finished second in 3:48:40 3-5.

Only two started in the light car class. Edmond, on a Darracq, did not finish on account of too many stops, due mostly to tires, which disheartened him. A. Clement, on a Clement-Bayard, had just as many stops, but stuck better to his task, probably because he was more interested in his firm, and finishing alone won in his class in

4:26:52 3-5.

The Monday races were far more interesting, being for the heavy and medium weight cars. The classes were divided in two, for cars between 450 and 700 kilograms, and for cars from 700 to 1,000 kilos. The latter class was the more interesting and attracted all the attention.

The start took place in the early morning, the cars leaving at intervals of two minutes. As a rule the cars and drivers seemed better tuned up and in better shape than at the start of the Gordon Bennett race, probably on account of the experience which the makers and some of the drivers had gained in that event and also because of the greater practice which all had gotten during the fine weather which has fawored us of late. At any rate, the start was more regular and without any hitches.

Throughout the race we were in doubt

as to the probable winner, although it appeared to all that the old Panhards had the best chance. They had the lead practically all the time, but their competitors were so close behind and proved so nearly equal that no one was sure of the victory even after the first car had arrived; so close were the others that long calculations of the allowances had to be made amidst the shouting of the anxious, interested par-

The results were at last published, as

Driver.	Nationality.	Car.	Time.	
Heath	.American .P	anhard	6:30:49	
Teste	.French P	anhard	6:31:44	
A. Clement	.French C	lement-	6:34:43	
		Bayard.		
Rigolly	French G	obron Bril	lie6:42:04	
Le Blon	. French H	otchkiss	. 6:54:05	
Duray	French D	arracq	6:55:34	3-5
H. Farman	French P	anhard	6:57:29	3-
Gabriel	. French D	e Dietrich	. 6:58:05	
Mark Mayhew	English N	apier	7:27:42	
Leger	French M	lors	7:45:15	
Fletcher	English M	lercedes	7:53:00	
Bianchi	English W	Volseley	7:54:10	
Lancia	Italian F	iat	7:55:25	
Salleron, :	French M	lors	7:55:34	

Heath, the winner, was born in America, but has lived many years in Paris, where he is universally known and liked as a "fine fellow" in the automobile centers.

A most promising driver, however, is the young A. Clement, son of the great French maker. We have already mentioned his plucky race in the French elementary trials for the Gordon Bennett. He has now been proved one of our best drivers by his success in these last races. He especially distinguishes himself by his pluck and absence of fear, and above all by his determination; he sticks to his race with the grip of a bulldog, and nothing short of a completely smashed car would stop him from going on until the race is called off or he passes the finishing post, whatever the difficulty of the repair may be. With a car 40 horsepower below that of the winner, he lost only four minutes in 600 kilometers compared with the latter. His secret is the adjustment and almost building up of his car himself, seeing that nothing is left to uncertainty.

The best run was made by Le Blon, the former driver of the Serpollet steam cars, now interested in the Hotchkiss gasoline car. This new make classed itself among the best, making 104 kilometers 252 meters (64.78 miles) in the hour, including all stops and everything.

A most interesting performance from a technical point of view was that of Rigolly. The holder of the world's record, in the same car which he had at Ostend, made a beautiful showing and had not his tires given him any amount of trouble he certainly would have been in the first, if not the very first. This was wished by many and was almost as good as done. It goes to prove that the same car that gave such terrific speed on short distances can also hold its own on the road and make a magnificent showing of reliability.

The big racing cars will now take a well deserved rest, and let their experts design their 1905 cars, profiting by the experiences they will have obtained. And now the autoboat comes at the head of the program of sporting events.

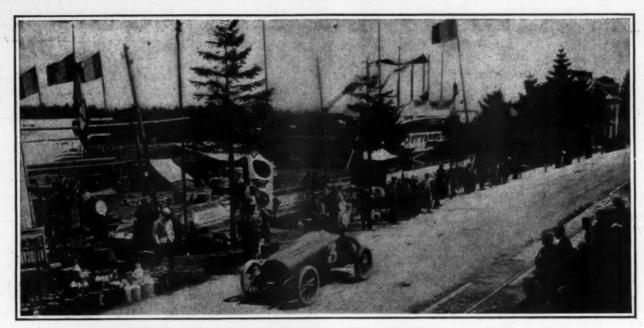
Sunrising Hill Climb.

The annual hill climbing contest of the Midland Automobile Club, England, was held again this year on Sunrising Hill, Kineton, near Stratford-on-Avon, July 23. The hill is an exceedingly trying one, as, in addition to its steepness it has three short turns, all of which occur on heavy grades. The start is made on a grade of I in 15, which rapidly increases to I in 8. Just before reaching the first curve the grade becomes easier, about I in 22, but on the turn the gradient runs up to I in 9, and here the rules of the contest called for a dead stop. Immediately on re-starting, the contestants were forced to negotiate another curve on a grade of I in 83/4 to I in 7. Another bend had to be rounded on a grade of I in 61/2, and here another stop was required. After a short sharp pull the grade comes down to about I in 8 at the end of the climb. The total distance being 3,000 feet.

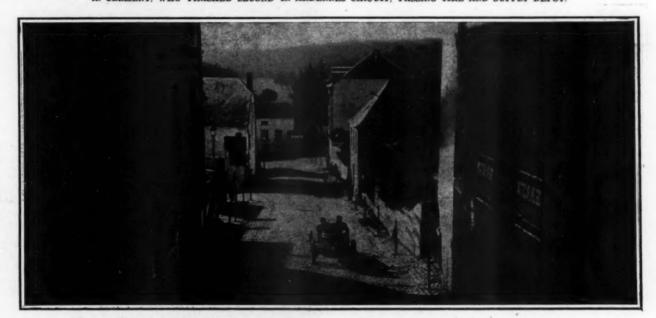
There were thirty-eight entries and twenty-nine starters, and out of this number but two failed to make the ascent. The best time was made by S. F. Edge in a 20-horsepower Napier, one of last year's racing machines with a touring body fitted. His time was 4:48 4-5. Four 28horsepower English Daimlers took the next four places, their times ranging from 4:49 3-5 to 4:58 2-5. A 60-horsepower and a 40-horsepower Mercedes failed to make much of a showing, owing largely to the greasy condition of the road caused by a heavy shower after the first few cars had made the climb. Three American cars-a 12-horsepower Duryea, a 61/2-horsepower Cadillac and an Oldsmobile runaboutwere on the entry list. The Duryea made the ascent in 5:36 2-5, but had a good deal of trouble in re-starting on the hill from slipping clutches. The Oldsmobile broke an inlet valve before starting, and did not compete. The Cadillac made a steady climb with four passengers on board in 10:23 4-5.

Such delicate affairs are the cellular radiators on some of the French automobiles that the makers insist that only distilled water should be in them.

The heat radiated from the flanges of an air-cooled gasoline motor cylinder, or absorbed by the water in the jacket of a water-cooled cylinder, represents just so much wasted power. A theoretically perfect motor would utilize all the heat in useful work, leaving none to be radiated or otherwise lost.



A. CLEMENT, WHO FINISHED SECOND IN ARDENNES CIRCUIT, PASSING TIRE AND SUPPLY DEPOT.



DESCENT AND ABRUPT LEFT HAND TURN IN NEUCHATEAU, OVER BELGIAN BLOCK PAVEMENT.



SCORE BOARD FOR ARDENNES CIRCUIT FACING GRAND STAND AT START AND FINISH LINE IN BASTOGNE.

1000-MILE NON-STOP RUN ON THE TRACK.

Packard Voiture Legere Completes Public Test on Grosse Pointe Oval in 29:53: 37 3-5 without Stopping the Motor— Trial Thoroughly Organized.

Special Correspondence.

Detroit, Aug. 8.—A non-stop run of 1,000 miles was completed at the Grosse Pointe track at 12:09:37 3-5 o'clock this morning—just a few minutes after midnight—by a Packard Model L, not the slightest hitch having occurred to mar the performance. The Voiture Legere, a four-cylinder stock car, was in as perfect condition at the finish as when it went on the track, and the 1,000 miles were covered in 29 hours 53 minutes 37 3-5 seconds. The objects sought in this trial were to test the motor under the steady grind of a 1,000-mile non-stop run, to secure data on

part of the driving, Mr. Waldron and Edward Roberts, who drove part of the time, state that the motor did not miss an explosion during the whole test.

The run began at 6:16 p. m. Saturday, and was conducted under a system of shifts of driving crews, there being three drivers and five mechanicians. After the track had become packed down hard it was like flint and proved very destructive to the tires. One set of special Diamond tires carried the car over the first 611 miles, but several changes had to be made in the next 150 miles or so, and the necessity for jacking up the axle, removing the wheel and slipping on another at frequent intervals, although done very quickly, caused the loss of many minutes. Altogether twenty-nine stops were made for changing and examining tires, lighting lamps and replenishing the gasoline and oil supplies. Schmidt drove the car 100 miles before discovering that through an oversight he had entered the track with

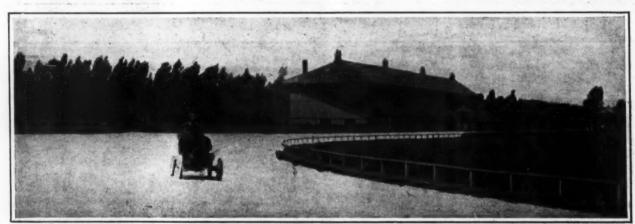
mile, but Roberts was instructed to take no chances in the darkness, and accordingly reduced the rate of his trick to about five seconds under two minutes.

An even gait was maintained all night, and the Sunday following passed uneventfully. Many visitors, afoot, on bicycles and in automobiles, rode out to watch the run. Following is a summary of stops and oil consumption:

Stops on account of tires, 12; on account of lamps, 4; for gasoline, 16; for lubricating oil, 3. Total quantity of gasoline used, 70 gallons; lubricating oil, 3 gallons.

The timing was accurately done with a split-second watch, the timers and score keepers being employes of the Packard company. The complete list of the officials is contained in the accompanying table.

If you get a slight bend in the axle, get it straightened without delay, for a wheel that runs out of thuth will absorb a lot of power, cause rapid wear of its bearings and,



ROUNDING FIRST TURN ON GROSSE POINTE TRACK IN PACKARD 1,000-MILE MOTOR NON-STOP RUN.

the consumption of gasoline, oil, water and electricity, and to study the durability of the various parts in order to make improvements in the 1905 cars.

As a matter of fact, the machine was driven considerably more than 1,000 miles, as a distance of not less than twenty-four feet from the inside fence was maintained in order to avoid the possibility of a repetition of the accident that spoiled the former attempt, and Sales Manager S. D. Waldron, who had charge of the run, told Charles Schmidt, the driver who began and finished the run, to do an extra five miles for good measure.

This is the first time an automobile has been driven 1,000 miles without stopping the motor, on a track where the trial was thoroughly organized and the public and the press had free access to the trial at all times. In carrying out the project the Packard company had the coöperation of other automobile manufacturers, dealers and rubber tire men as officials and judges, notably Henry Ford, W. C. Rands and Harry Unwin. The machine was, of course, stopped at intervals to replenish the supply of gasoline or put on new tires, but the motor was not stopped for an instant. Designer Schmidt, who did the greater

but six gallons of fuel in the tank. The track was in excellent condition.

About 150 miles had been covered at 10.30 o'clock Saturday night, the sixty-fifth mile having been the slowest, owing to Schmidt reducing speed to light the lamps. The time was 4 minutes 33 1-5 seconds. The fastest mile of the entire run was done just before dark, and was clocked at 1.25 3-5. At midnight 200 miles had been covered, the car being then in charge of "Eddie" Roberts, foreman of the Packard motor room. Schmidt figured on being at the wheel about 90 per cent. of the time. He had kept the pace up to about 1.49 for the

what is probably the worst feature, plays havoc with the tire. If you run over a large obstruction, or accidently run one wheel up on the curb, take a look at your axle and make sure that it is straight. If not, have it attended to.

Chauffeur.—Excuse me. You say you are not seriously hurt. Then isn't \$50 damages a trifle high?'

Mr. Ironback.—Say, you can't git out of it that way. I advertised in the local paper last week that 'Hereafter my rates for bein' knocked down by auto machines was to be raised to \$50.—Chicago News.

TIMERS, SCORERS AND JUDGES OFFICIATING IN DIFFERENT STAGES

S	tages.	Timer.	Scorer.	Judge.
	100 F.	R. Humpage	.J. H. Normingt	ton
50-				
100-	150 J.	J. Ramsey	.M. C. Taylor .	
150-	250	#		E. H. Broadwell.
250-	350 Rs	issell Huff.	J. C. Harringto	M1
350-	400	84		
400-	500 F.	R. Humpage	. I. H. Normings	ton
	-	4		
				Bowen and Hall.
700-	750 Ri	assell Huff	A. C. Harringto	on
	800			
		uff and Humpage		
820-	000 P	R Humpage	I. H. Norming	ton
030	050	a	7	J. C. Weston.
950-1	,000F.	R. Humpage and J.	j	Weston, Unwin, Henry Ford.
		Ramsey.		Chas. P. Root, Geo. W. Gunn,

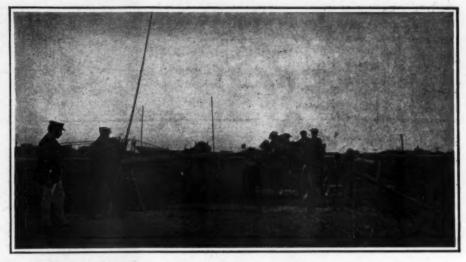
The Ostend Gymkhana.

Ostend week was brought to a close on July 21 with an automobile gymkhana, in which M. Jochems, in a Mercedes, won first place and M. De Breyne, in a Darracq, second prize. The gymkhana events consisted of feats of dexterity and skillful operation on the part of the drivers, who had to drive their machines backward through a tortuous maze marked by posts, pick up rings, ring bells "on the fly," climb a mound, cross a trench on narrow rails, pass, at considerable speed, between balloons set close together, which would explode if touched, and, finally, steer a course through a crowd of wooden men, very naturally arranged so that the harassed chauffeur could avoid mowing them down only by the most extraordinary efforts. There was also a floral decoration contest, which was won by M. Jochems.

The gymkhana has become so popular in Europe that it is the usual closing event of every automobile met; one reason for its popularity being that the competitors are frequently women, who often prove themselves a match for the lords of creation in this form of sport. The gymkhana is gaining ground in the United States, and doubtless will be more appreciated when it is better known.

Motor Cars in Scotland.

In 1902 there were only about 250 motor cars in all Scotland, whereas there are now 200 in Edinburgh alone, and about 2,000 in Scotland. Only four Scotch cars are on the market, these being the Argyle, St. Vincent, Albion and Arrol-Johnston, but the Scotch carriages builders are wisely turning their attention to the building of automobile bodies in order to compensate for the loss of carriage business. The cars owned in Scotland are mainly of the larger types, doubtless owing to the fact that they are the property of wealthy persons, to whom the price of a large car is no objection. "The demand for small cars is increasing,



MAKING QUICK STOP AT SIMULATED RAILROAD CROSSING AT OSTEND GYMKHANA.

however, at a rapid rate," writes United States Consul Fleming to Washington. Self propelled motor coaches for railroad work on branches will likely be adopted in Southern Scotland if the experiments now being conducted with motor coaches in England and Wales should prove as successful as is anticipated. The first experiments were made by the Taff Vale Company, which ran a steam coach between Cardiff and Penarth, Wales, at a cost of 11 cents per mile, as against a cost of 30 cents per mile for an ordinary train consisting of a locomotive and four cars, and six additional motor cars have been ordered as a result. Gasoline motors for this work are being experimented with by the Great Northern Railway.

English Channel Boat Races.

The international motor boat race across the English Channel from Calais to Dover, which was run on August 8, was won by a French boat, Mercedes IV., the time being I hour 5 minutes. An English boat took second place and a Belgian boat third place. There were twenty-two competitors out of thirty-two entries, and the race was followed by excursion boats carrying spec-

tators and by French torpedo boats, in one of which was M. Pelletan, the French Minister of Marine. In the competing classes divisions had been made for racers of various lengths, cruisers and finished boats. The speed craft included such boats as Rapee III., M. Charley's Mercedes III., the Richard-Brazier, boat, Trèfle-à-Quartre, Fournier's Hotchkiss, Gardner-Serpollet, Napier II., N'a pas Pied (formerly Napier I.) and other well known high speed boats.

SALT LAKE ILLUMINATED PARADE.

Special Correspondence.

SALT LAKE CITY, Aug. 4.—An illuminated floral automobile parade was held here last Saturday evening and scored a decided hit. Thousands of persons lined the streets through which the beautifully decorated cars passed, and crowds thronged Utahna Park, where the parade ended and the prize, a handsome silver cup, was awarded to Orson H. Hewlett, whose Fredonia touring car was fairly smothered out of sight in many varieties of flowers. A special point in the scheme of decoration of this machine was the American flag on the front, done in roses and carnations. In addition to flowers, the winning machine, as well as the others in line, was hung with Chinese lanterns, greatly heightening the effect.

There were twenty-five machines in line and the procession was headed by a brass band. Mr. Hewlett's win was not by any means a walkover, as there were many cars decorated with artistic taste.

The excruciating noises produced by vigorous filing across the edge of a piece of sheet metal may be avoided by filing along the edge, or across at a slight angle, instead of directly across. Also, if the work can be held in the vise, keep the edges to be filed as close to the jaws as possible. By careful management the noise can be reduced to almost nothing. Even if you don't object to the nerve-racking screeching, you can do better work by following the foregoing directions. A screeching file does not cut fast or smooth as a quiet one.



CROSSING NARROW RAILS OVER DITCH REQUIRING SKILFUL STEERING OF LARGE TOURING CAR.

British Motor Boat Reliability Trials.

Special Correspondence.

ONDON, July 28.—Marine motor week, one of the principal events in the automobile season of 1904, was ushered in July 26 and 27 by a two-days reliability tour in the Southampton waters, for which twenty-six boats had entered. Only sixteen appeared, however, at the hour of starting on the first day, but they rendered such an extremely good account of themselves as to console all concerned for the decreased number of participants.

The course marked out was a distance of 9½ nautical miles, commencing at Southampton Graving dock, and the task set was to complete as many rounds as possible within the ten-hour limit for the daily tour. Each boat was accompanied by an official observer, who kept careful account of all incidents and of the fuel used during the test. The War Office and Admiralty were both represented.

On the opening day the weather was fine, and of the sixteen boats fourteen were able to complete their task, the 28-horsepower Daimler, entered by Gorham & Manville, being thrown out of competition by a broken clutch, and the 5-horsepower Cornubia having a damaged pump. The Cannstatt Daimler boat was running excellently when it was forced to retire. It had been started off first, with Napier Minor second.

There were several minor incidents that prevented actual non-stops being made by some of the contestants, but on the whole the repairs were not of any magnitude. The longest stop was a quarter of an hour, made by the Brooke 14-horsepower, owing to defective water circulation. Much interest was evinced in Miss Larkins, who carefully steered the 18-horsepower Wolseley boat for the greater part of the ten hours.

The Napier Minor was the out-and-out fastest boat, as will be seen by the following list of the laps made in the first day's running:

The engine of the carvel built Launch Motor Co.'s boat was built by the Lozier Motor Co.; that of Cloud & Nichols by the Buffalo Gasoline Motor Co., and the Woodnutt engine by the U. S. Long Distance Automobile Co.

Fifteen boats started July 27, the second day, as Cornubia's damages were repaired, and every one of the fifteen finished their arduous task in unpleasantly damp weather. This is a most laudable result, comparing very favorably with trials on land. Napier Minor again came out at the head of the list on the showing both of this day and the whole trials and completed a non-stop, although the speed had to be greatly slackened about half-way through, owing to a broken wire in the coil, which rather upset Mr. Edge's calculation of outdoing his achievements on the previous day. Although he could complete only thirteen laps as

and the Woodnutt, Mitcham and Maudslay launches. The official classification is not yet available, but the number of laps covered by the participants during these first trials for motor boats under the auspices of the Automobile Club of Great Britain and Ireland are as follows:

Napier Minor, 73-hp., 28 laps; Scolopendra II, 20-hp., 19 laps; Durendal, 22-hp., 17 laps; Brooke, 14-hp., 15 laps; Woodnutt, 10-hp., 14 laps; Clement, 13-hp., 14 laps; Maudslay, 20-hp., 14 laps; Cloud & Nichol's 10-hp., 14 laps; Wolseley, 18-hp., 13 laps; Gobron, 12-hp., 13 laps; Cornubia, 5-hp., 12 laps; Vosper, 12-hp., 12 laps; Mitcham, 6-hp., 12 laps; Launch, 5-hp., 11 laps; Seal, 21-2-hp., 9 laps.

Napier Minor covered 142.95 nautical miles on the first day in 9 hours 50 minutes, and 123.89 nautical miles in 9 hours 31 minutes on the second day, a total of 266.84 nautical miles in 19 hours 21 min-



AUTO-BOATS AWAITING THE START IN DOCK AT SOUTHAMPTON.

against fifteen the day before, he was nine rounds in the lead of the second swiftest boat, Scolopendra II. His fastest time for the circuit of 9½ nautical miles—38 3-4 minutes—was made in the second round.

The Cornubia, too, ran excellently without a stop for the ten hours.

Non-stops for the whole twenty hours' trial were made by Napier Minor, Seal,

utes. The breaking of an ignition wire on the second day cut out one cylinder, which prevented the second day's record from equaling that of the first, but Napier Minor had a long lead notwithstanding the difficulty.

The five American motors in the trials all gave good accounts of themselves, such troubles as occurred being of the minor

DETAILS OF COMPETING AUTO-BOATS IN BRITISH RELIABILITY TRIALS, AND RESULTS OF FIRST DAY'S RUN.

					Overall	Length	Horse-	Laps	Nautical	Time.
Order.	Entrant.	Name of Boat.	Builder of Hull.	Builder of Engine.	ft.	in.	power.	Covered	. Miles.	h. m. s.
- 1	S. F. Edge	Napier Minor	.Saunders' Launch Co	D. Napier & Son	35		73	15	142.95	9:50:00
2	Frank Beadle	Durendal	.Saunders' Pat. Syn	M. M. C	29	7 1-2	22.6	9	85 1-2	9:14:00
3	J. I. Thornycroft, Ltd	Scolopendra	.Maynard	J. I. Thornycroft, Ltd	. 30	0	20 8	8	76	9:14:00
4	J. Gorham	Daimler	.Canstatt Daimler	Daimler Co., Coventry	40	0	28	8	retired,	6:01:00
5	Woodnutt & Co	Woodnut:	. Woodnutt & Co	U. S. Long Distance Automobile Co	. 30	0	10	7	66 1-2	9:03:00
6	Gobron Motor Co	Gobron	.Hansen	Gobron-Brillie	. 30	0	12	- 7	66 1-2	8:51:00
7	Maudslay Motor Co	Maudslay	.Sargeant & Co	Maudslay Co	. 25	6	20	7	66 1-2	9:11:00
8	Cloud & Nichols		.F.G. Maynard	Buffalo Gasoline Motor Co	24	II	9.6	.7	66 1-2	9:23:00
9	J. W. Brooke & Co	Brooke :	.H. Reynolds	J. W. Brooke & Co	25	0	14	7:	66 1-1	8:48:00
10	Launch Motor Co		.F. G. Maynard	Lozier Motor Co	24	11	- 5	. 6	57	9:11:00
11	Vosper & Co		.Vosper & Co	Vosper & Co	. 22	1 1-2	12	6	57	9:01:00
12	Mitcham Motor Co	Mitcham	.Camper & Nicholson	Fay & Bowen	22	.6.	6	. 6	. 57	9:09:00
13	Wolseley Tool & Motor Co.	Wolseley		Wolseley Tool & Motor Co	- 22	3	18	-5-	47 1-2	8:53:00
14	Seal Motor Co	. Seal	.F. G. Maynard	Seal Motor Co	18	0	2 1-1	5	47 1-3	9:03:00
15	G. Phipps Spooner	Cornubia	. Hart. Harden & Co	Tangyes, Ltd	35	0	. 5	5	retired.	6:51'00



THORNYCROFT 20-HORSEPOWER, 30-FT. LAUNCH "SCOLOPENDRA II," SECOND FASTEST BOAT.

sort and due more to carelessness in operating than to any defect in the mechanism. One skipper, for instance, forgot to replenish his fuel tank and so stopped his motor. In another case dirt in the gasoline clogged the carbureter, causing a short delay.

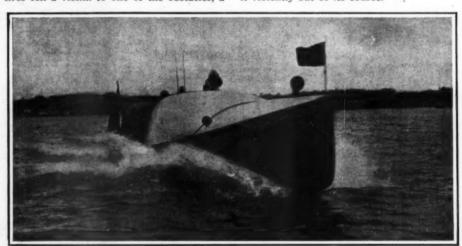
Tire Bursting Demonstrations.

Special Correspondence.

LONDON, July 30.—In order to prove that, given a car properly constructed and just as properly attended and a cool and experienced driver, the bursting of a tire is not necessarily followed by an accident, S. T. Edge instituted a series of demonstrations on the Crystal Palace Fireworks ground in London this week.

Aided by Cecil Edge, of non-stop fame, and Mr. MacDonald, who carried off a prize at the Kiel regatta, Napier cars of different horsepowers were driven at full speed over a specially prepared course covered with such formidable articles as broken glass bottles, iron plates with projecting steel points, boards bristling with carpenters' chisels, long nails and other instruments of destruction.

Cecil Edge commenced the experiments, driving his 15-horsepower car backward and forward over the stretch. Whenever the tires fell a victim to one of the obstacles, a Bennett racer then gave some most convincing demonstrations. A speed of more than fifty miles an hour was attained, and although punctures occurred at this high speed, no swerve was noticeable. With a front tire cut by the chisels and a back tire burst by an iron spike and held to the rim on one side only, Edge made the crowning experiment of the day. Running the car at top speed, he endeavored to detach the tire entirely without abating the pace by throwing the vehicle quickly from side to side. This succeeded to everybody's satisfaction, the Napier racer after the tire was dashed off continuing in a straight line on a deflated front tire, two perfect ones and the bare rim, and promptly replying to the brakes at the close of this final test, which has proved that it needs somewhat more in the majority of cases than a burst tire to overthrow a reliable car, or even to throw it violently out of its course.

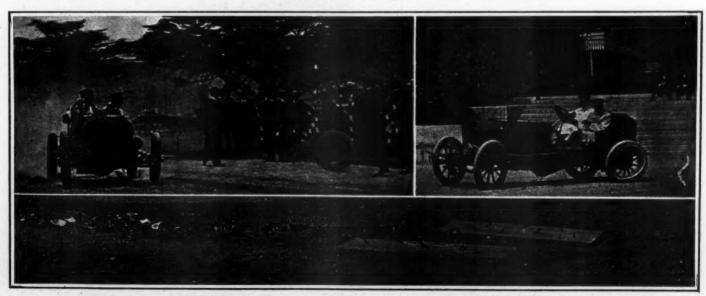


"NAPIER MINOR," WINNER OF RELIABILITY CONTEST AND ALSO OF HARMSWORTH CUP RACE.

slight jolting was the only result, the car keeping in its course in spite of the deflations.

S. F. Edge, on his 80-horsepower Gordon

Fifty-three hundred automobiles have been registered in the State of Massachusetts since the new law became effective last September.



Casting Shoe from Rear Wheel at High Speed.

Puncturing Implements Laid on Course and Driven Over at Fifty Miles an Hour.

PHOTOGRAPHS OF TIRE BURSTING AND DETACHING DEMONSTRATIONS BY S. F. AND CECIL EDGE IN LONDON.

correspondence

Another Transcontinental Trip.

Editor THE ACTOM BIL

Sir:-We leave San Francisco to-day in a Franklin car to make the run to New York City-or to atetmpt to make it. As an operator of one of the only three cars to ever cross the continent, I speak with a little caution on the subject, as I have passed that period of confidence assumed by the beginner in the game. Nevertheless, we shall start to-day at 3 p. m., and regarding our progress shall advise you later.

The machine is a regular stock car, but we have put in a larger tank for gasoline and fitted Diamond 3 1-4 by 28-inch doubletube tires. The engine is a four-cylinder air-cooled motor, this being the first aircooled car to tackle the heat and sand of that hard part of the desert route from Reno to Ogden (600 miles) and from Ogden to Cheyenne (400 miles). My companion is C. S. Carris, of Syracuse, N. Y., twentyseven years of age and weighing 156 pounds.

I have added an axe to my outfit, having learned some things about the roads and sage brush. We will take a shovel, too, for the good roads movement has not hit the ground in some places. I enclose a snap shot of the outfit taken in front of the Cliff House in 'Frisco.

L. L. WHITMAN.

San Francisco, August 1.

Automatic Valve for Runabout.

Editor THE AUTOMOBILE:

Sir:-Will you please tell me the advantages relatively of the cam lifted and the automatic valve? I have a light car, an Olds, which was in perfect time according to instructions, but it ran sluggishly. I removed the inlet valve lever and replaced the heavy spring with a light one, trying till it did the best, and the car runs faster and stronger. Why is the automatic valve not the better? M. P. GREEN.

Pasadena, Cal.

The advantages of the cam lifted, or mechanically operated inlet-valve, are, briefly, positive action and non-liability to get out of adjustment. Its chief disadvantages are, complication due to the number of extra parts necessary to actuate it, and its inflexibility, which does not allow it to accommodate its closing time to various

Advantages of the automatic valve are simplicity, cheapness of manufacture, "flexibility"-which permits it to remain open until the cylinder is completely filled with gas -and on account of its pulsating or fluttering action it assists carburation, especially at low engine speeds. The disadvantages of the automatic valve are many. Among these are, sticking to its seat, liability to get out of adjustment, noise, tendency to break its stem and cotters owing to its chattering action and difficulty of correctly adjusting the tension of the spring.

In answer to your direct question, "Why is the automatic valve not the better," we may add that the automatic valve is more delicate than the mechanical, and gets out of adjustment much more easily, and is therefore less suited to motors on runabouts than the mechanical valve.

With a correctly designed and correctly timed mechanically actuated valve your motor should at any constant speed develop more power than with the automatic valve.

Effect of Street Rubbish on Tires.

Editor THE AUTOMOBILE:

Sir:-It seems to be the custom of too large a portion of our population to deposit its rubbish in the street or highway. In size of a brad up to a twenty-penny scatters them off one by one. The truckman never gives a thought to his death-dealing and destructive carelessness until his horse steps on a rusty nail protruding from a box cover dropped from a load hauled by another of his own calling. When his horse dies of lockjaw he protests with vigor against the carelessness of the other fellow. Not so with the motorist who picks up the loose piece of board by the nail that protrudes an inch or more, quickly finding the wind in his tire and letting it out, while perhaps the board flies through the air, smashing a lantern or breaking a mud guard. The motorist makes no protest but gets out his repair kit and proceeds to patch the punctured inner tube or to replace it, mentally congratulating himself meanwhile,



WHITMAN AND CARRIS, AT CLIFF HOUSE, SAN FRANCISCO.

addition to the broken bottles, barrel hoops, probably, that he has not been held up for spring beds, antiquated hoop skirts, and bustles that find a place on the highway, there is a class of specialists in this line of distribution who travel the public roads and streets contributing their mite to the tire-destructive material as they go along.

Among the latter is the milkman, who carelessly throws his broken bottles against the curb and innocently slumbers homeward from his morning's work oblivious of the pain and sufferings of the bare-footed child or the destruction of the tires of the carriage, bicycle or motor car that happens to come in contact with the sharp edges of his broken glass.

The truckman with his load of empty packing boxes and crates with loose covers bristling with sharp pointed nails from the exceeding the local speed limit of eight miles per hour by the same authorities that granted a license to the truckman to distribute nail-studded boards on the public

The delivery wagon of the bottling establishment adds to the contribution of broken glass; the lamplighter-who ever saw him remove broken glass from the vicinity of the lamp on which it has broken? Then there is the linemen of the telegraph, telephone and trolley companies, who nip off the surplus wire in pieces from an inch to a yard long. The junk man never counts the loss of a pitchfork or a few old horseshoes with nails in them worthy of replacing in his wabbling old wagon when they drop off, but the driver of a rubber tired vehicle traveling in his wake has reason to bemoan the other fellow's loss.

I never approach a newly planked bridge without a feeling that I may find one or more of the nails so considerately left by the carpenter who planked it.

In driving an automobile upwards of 30,000 miles, I have had about as varied a tire experience as falls to the lot of any one operator, yet I never had but one puncture from broken glass that put the tire out of business at the time; but I would prefer to get a puncture from a nail and have it over then and there than to have the covering of my tire scored all over by broken glass, as in nearly every case when you get a cut from glass it goes through the canvas, letting water and filth in to be absorbed by the fabric and rotting it until it becomes so weak that the shoe will blow out.

What is more exasperating on a beautiful day when spinning along over a smooth piece of road exhilarated by the fresh air than suddenly to hear a bang as of a pistol shot and feel that grinding bumping of your car as it gradually slows down on a deflated tire? You find upon examination that there is a hole in your shoe that you can put your fist through and a tear in the inner tube running in three different directions. If you will notice carefully you will find that the direct cause of the explosion is that the covering of the casing was cut by some glass or other substance, thus letting water and mud in to rot the canvas.

There are laws and ordinances enough prohibiting the throwing of rubbish in the streets and highways, if properly enforced, to reduce tire troubles to a minimum, and if a small percentage of the attention devoted by public officials to controlling the speed of motor cars could be diverted to the prevention of this nuisance their efforts in this direction would merit the approval not only of motorists, but of bicyclists and owners of valuable horses and rubber tired vehicles of all kinds.

ASA GODDARD.

Worcester, Mass.

Corrections.

Editor THE AUTOMOBILE:

Sir:—My article in the August 6 issue, under the heading "Cure for Ignition Troubles," has two errors which I would like to have mentioned in your next issue. One was, I presume, a typographical error, and was as follows:

"Have the two points on the switch close enough together so that in charging the switch lever will not rest on both points." The "not" is extraneous and is a bad mistake, as the object in placing the two points close together is to allow the switch lever to rest on both at the same time when charging, and on either point separately when using battery or dynamo.

The other error is in the last paragraph, which reads "is about exhausted when re-

duced from 1.2 to 1.3." The figures should read I to 1.1. C. T.V.

Bloomfield, N. J.

Hints on Dry Batteries.

When installing dry batteries, be sure that the paper cases or envelopes are on each cell. If these envelopes are left off and if the cells touch each other they will short circuit. See that the paper caps on the bottoms of the cells are also in place. If the cells are carried in a wooden box or receptacle, no damage will result if the bottom caps are left off, but short circuiting will result if the batteries are placed in a metal case without the caps. Handle the cells carefully, because if one is dropped the carbon plate which projects through the top of the cell, which is very brittle, may be fractured. This will render the cell useless.

When tightening up the binding screws on dry cells, use a small pliers, and be careful not to strip the threads or break the carbon plate. See that the binding screws are securely fastened in the carbon plates, and that both make good electrical connection.

When wiring up a set of dry cells, allow sufficient slack in the connecting wires to prevent them from breaking should the cells happen to shake around. Sometimes when the connecting wires are tight the insulation will be sawed through by the edge of the zinc cylinder, which forms the containing vessel of the cell, and a short circuit results.

If batteries become exhausted quickly and for no apparently good reason, examine the bottom of the box in which they rest. This box is usually made of wood, and is often secured to the machine by means of a metal strap which passes under the bottom. This strap is usually fastened to the box with screws, and the latter may be too long and may project through the bottom of the box on the inside. It is plain that if the cells are resting on these projecting screw-points the vibration of the car will soon force the screws through the paper covers. The screws will then short-circuit the zinc shells, through the metal strap on the bottom of the box.

Storage batteries may be short circuited in this way as well as dry batteries, but with more serious results. In this case the screw or nail points—as the case may be—will punch a hole through the jar or cell which contains the liquid or electrolyte, allowing the latter to leak out, and in this way render the cell useless.

Batteries which have been damaged in this way may be repaired (temporarily) by plugging the holes with chewing gum, which has been masticated for a little while. Use a good-sized lump of gum. This should be applied on the outside of the containing cell or jar, and held tightly in place by means of a tape. After the hole is stopped fresh solution can be put into the cell, and the battery charged up, if it needs it. It is hardly necessary to add that the offending nail or screw should be removed before the battery is again placed in the battery box.

One good point about gasoline is that it is not only incapable of making things with which it comes in contact dirty, but will effectually remove grease and other spots from almost anything—



The colonial 'bus shown herewith has just been completed by the Knox Automobile Company and shipped to C. H. Martin, who is conducting an automobile stage service in Porto Rico. The 'bus has a regular double opposed Knox air-cooled motor. The special body seats fifteen passengers and has room in addition for baggage and mail. The car has a wheelbase of 96 inches and tread of 56 inches. The wheels are fitted with 4-inch solid rubber tires. There are two folding side racks that let down for carrying luggage and one that lets down in front for carrying mail pouches. The weight complete is 3,580 pounds. This vehicle can be converted into a patrol wagon by leaving off the racks. Orders for four similar 'busses for transferring passengers and baggage in Pittsburg have been placed by the Pittsburg Transfer Company.



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Climax in Reliability Tests.

Almost simultaneously with the successful conclusion of the largest and

longest organized automobile tour ever held, not only in this country but anywhere in the world, comes a climax this week in another form of the practical demonstration of the degree of perfection to which the new means of transportation, scarcely yet a decade old in this hemisphere, has been brought-the non-stop run. The completion of the arduous road run from New York to St. Louis and back in fifteen days by a large touring car carrying three or four persons, and the running of 1,000 miles on the Grosse Pointe track in thirty hours, both without stoppage of the motor, should deal the death blow to that frayed old pun about the automobile that "ought to mote but won't."

Any one who has a personal knowledge of our wagon roads between New York City and St. Louis, either by way of Chicago or Pittsburg, will have a proper respect for any car that can make the trip in two weeks under the weather conditions that have prevailed this month; then add to this the incessant watchfulness and nursing required to keep the motor from stopping even once in the 3,000 and odd miles, while climbing steep and rough ascents, sliding into ditches in the darkness on strange roads, and meeting all sorts of unexpected obstacles. The difficulty of keeping batteries, plugs and carbureter continuously

in working condition is recognized, even with the best of motors.

The track test of 1,000 miles, while lacking most of the elements of ordinary road traveling, possesses the merit that it can be constantly watched and checked by a corps of disinterested persons, and by any number of spectators who care to verify for themselves the claims made.

These three supreme tests of the reliability of transmission, engine and running gear of both the American and foreign motor car are gratifying contrasts to the early experience of many purchasers who have good naturedly made fun of their mishaps and disappointments, but courageously stuck to their faith in the final and early development of the entirely dependable road car. Their faith is having its reward now. With the season's remarkable successes in bringing to America the world's records in speed trials on straightaway and track, in mountain climbing up Mount Washington, and in continuous road driving throughout a fortnight or more over all sorts of American highways, it now becomes necessary to look for some new form of competition to set as a test. Speed, power and reliability have been pretty thoroughly demonstrated, but there are left as factors insufficiently tested, simplicity and ease of operation, responsiveness of motor, steering and brakes, and general comfort and convenience.

Foreign countries have gone farther along these lines than we have in this country, their gymkhana contests, anti-skidding and anti-dust raising trials, starting, stopping, and standing start speed competitions, and tire bursting demonstrations being promoted with these objects in view. Events of this nature would lend a welcome variation to our race meet programs, especially in the smaller cities where it is difficult to secure entries of high powered and very fast cars. Spectators grow weary of a long program of slow races and walkovers, especially if the events are all of the same character and length. The so-called gymkhana events introduce entirely novel and frequently amusing contests of skill on the part of the operator and adaptability of the car that hold the interest of the spectator, and have a certain value of their own.

*

There is a generally ad-Proposed mitted need for a direct Road to Long Island. route, broad enough and straight enough to admit of high speed without annoyance to the public, by which automobilists may get from Manhattan to the suburban region of Long Island. One of the most feasible suggestions to be made on this subject comes from Henry Clay Weeks, the well-known sanitary engineer, who has done such effective work in ridding various Long Island communities of mosquitoes. It is to start from the eastern terminus of the Blackwells Island Bridge (now building), and convert Jackson avenue and the connecting street through Flushing, Bayside and Little Neck into a parkway 200 feet wide, which will extend almost straight from the bridge to the city line near Success Lake. From there it could readily be extended to meet the Jericho turnpike near Westbury; or one can reach any point on the island by splendid roads without such extension. In this connection it is proposed that the marshy and now almost valueless lands about College Point and at the heads of Flushing and Little Neck bays be drained by tide gates and converted into recreation parks for the rapidly growing population of the metropolis. If not so converted, these lands will be built up with various factories, which will depreciate greatly the value of the surrounding land for residential pur-

The value to automobilists of such a highway as the above will be particularly manifest in connection with the proposed speedway from Floral Park to Hicksville, announced in a recent issue. From the end of the boulevard at the city line to Floral Park is less than five miles by a nearly straight macadam road, the boulevard itself being about fifteen miles long. It is proposed in the boulevard, as in the speedway, to have separate strips for different classes of traffic, and to give the automobilists one strip to themselves. Although the boulevard would not, like the speedway, be on private property, there is every reason to believe that the speed regulations on it would not be stringent.



Pennsylvania toll road Basis for companies appear Toll Charges. have a high appreciation of automobile horsepower ratings-much higher than new purchasers of motor cars, who have tried to climb some of the Pennsylvania mountain roads. A Lancaster County turnpike company whose charter provides for a charge of 10 cents for every five miles for "a chariot, coach, phaeton or dearborn with one horse and four wheels" and 12 cents for five miles for two-horse vehicles, "and for every other carriage of pleasure, under whatever name it may be known, the like sums according to the number of wheels and horses drawing the same," has apparently assumed that one horsepower is equivalent to one horse. On this basis it would charge \$2.40 for every five miles for a 40-horsepower touring car. Should it take full advantage of the rights conferred by its charter, we might expect it to multiply the toll rate by five, "according to the number of wheels," as follows: Front wheels 2, drive wheels 2, steering wheel 1, flywheel I, change speed gear wheels 7, drive sprockets 4, cam-shaft gear wheels 2, pump gear wheel I-total 20. A chariot or dearborn has four wheels and an automobile twenty, ergo, multiply \$2.40 for forty horses by 5-result, \$12 for traveling over five miles of wornout turnpike.

500 CARS WANTED FOR G. A. R. VETERANS.

Many Owners Offer Machines to Take Old Soldiers for Run Over Historic Ground on August 18 During Boston National Encampment.

Special Correspondence.

Boston, Aug. 8.—Plans are rapidly maturing for the automobile run which is to be one of the great features of the entertainment of the Grand Army veterans during their national encampment in this city next week. The plan of giving the veterans a ride in automobiles round about Boston was suggested some time ago, and, after consideration, the entertainment committee of the encampment decided to send out circulars to automobile owners in Boston and within a radius of twenty miles of the city, asking them to cooperate with the committee. The responses were quick and numerous. Private owners in almost every town and city in the vicinity of Boston offered to lend their machines for a day and almost without exception the owners offered either to act as drivers themselves or to provide chauffeurs.

The expectation of the committee, when the plan was first broached, was that it might be possible to obtain two score or more machines, and that with these perhaps a hundred old soldiers could be taken out into the country for a day's enjoyment. The first mails after the circulars were sent out, however, brought in nearly 100 favorable replies, and from day to day the number has been increased, so that at the present time the committee has had placed at its disposal nearly 300 cars, from runabouts to touring cars. But with the growth of the number of machines at its call, the plans of the committee have expanded, and it is now hoped to secure as many as 500 cars for the tour.

As soon as the veterans heard of the plan they began to send in requests for places in the cars, and the number of requests now at hand far outnumbers the accommodations that can possibly be secured. So far most of the cars secured are privately owned, but the committee hopes to be able to induce the manufacturers and agents to make up the required number. This the makers and agents are willing to do so far as lies in their power, but at this season of the year they have not a large supply of extra machines on hand.

Plans for the tour have been practically completed, and no matter how many machines are secured it will not be necessary to change them. The day has been set for Thursday, August 18, and it is expected that noon-time of that day will see the largest number of automobiles gathered, at Symphony hall, at the corner of Huntington and Massachusetts avenues, in Boston, that has ever been collected in one place in New England. The run is to start at 1 o'clock in the afternoon and will be in two divisions, each under competent leaders and The first section will proceed pacemakers. down Massachusetts avenue, across the Harvard bridge and through Cambridge to Harvard square, where the veterans will have an opportunity to see the grounds and buildings of Harvard college, the Washington elm and other historic spots. Continuing up Massachusetts avenue the cars will pass through Arlington along the route of Paul Revere to Arlington Heights. All along this route there are houses and places associated with colonial and revolutionary history which the veterans will be able to identify by means of guide-books and maps that are now being prepared.

At Lexington Green a short stop is to be made to enable the tourists to inspect the Minute Man Monument and relics of the battle of April 19, 1775. Then the procession will proceed to Concord, where another stop is to be made to give the passengers opportunity to visit places of interest. The return journey will be through Lincoln, Waltham and Newton, along the picturesque Charles River, past some of the large industrial establishments and parts of the Metropolitan park system. The return journey is to be over some of the finest roads in the eastern part of the State, including the Newton boulevard from Auburndale to Boston.

The second section is to cover the same route as the first, but in the reverse direction. It is planned to have both parties meet at Concord, where the two sections will be reviewed and the stop will be long enough for the veterans to get a good idea

of the famous place.

Each automobile is to have as decorations a silk flag three feet long and two feet high on a staff with yellow streamers. On the flag will be the names, "Lexington, Concord and Cambridge," and these flags will serve as souvenirs of the journey. The entertainment committee of the encampment which has charge of the automobile tour consists of Charles H. Baker, of Lynn, chairman; Joseph B. Maccabe, of East Boston; Leonard D. Ahl, of Boston; George E. Henry, of Boston; Elliot C. Lee, of Brook-

ton; Leonard D. Ahl, of Boston; George E. Henry, of Boston; Elliot C. Lee, of Brookline; William M. Olin, of Boston; Joseph E. Shaw, of Boston; Jesse S. Bartlett, of Boston, and Eugene B. Fraser, of Lynn. The arrangements for the automobile trip are under the special direction of a subcommittee headed by Elliot C. Lee, president of the Massachusetts Automible Club.

GORDON BENNETT ENTRIES.

A. C. A. Racing Committee Promulgates Stringent Conditions Governing American Entrants.

The conditions governing the entry of American cars for the Gordon Bennett race of 1905 were announced by the racing committee of the Automobile Club of America on Tuesday. They require that all entries from the United States must be made through the A. C. A., by which they will

be received up to December 15, 1904.

Each entrant must deposit a sum of \$600 as a guarantee of good faith, and must file with the secretary of the club by April 15, 1905, an affidavit signed by two responsible persons stating, on their own knowledge, that the car has been entirely completed for a period of over four weeks; that they have driven the car over 1,000 miles on the road; that they have driven the car over 250 miles without stopping the engine, and that they have driven the car more than forty miles in less than sixty minutes on track or road.

The racing committee will decide which of the entrants may compete in the cup race, arriving at such decision by trial, contest or otherwise as it elects. All cars must be placed for this purpose at the disposal of the committee on April 15 and thereafter until the decisions are made. Any entrant who fails to appear with his car at the times and places designated by the committee, or who refuses to undergo the tests, shall be ineligible to compete in the 1905 race and may forfeit his entrance fee. The fee will be returned to any who comply with all requirements but are not selected by the committee. Names of the intended drivers must be submitted to and approved by the committee. Any entrant nominated for the race who fails to start shall forfeit the \$600 entrance fee.

Magistrate Cornell now denies that he said it. As near as he came to saying it was to remark in an aside to a bicycle policeman in connection with a particularly bad case of reckless driving, that "in case any of these people had been run over and injured I should not have blamed them very much if they had shot at the automobilist." To a reporter the following day the magistrate told of several cases of reckless driving that he had personally witneseed and said that one of them was "a case where probably the only thing that would have stopped the automobilist was a shot gun." But still he denies that he "ever advised anybody to shoot at anybody else." He admits that he declined to make any explanation of the remarks attributed to him to the Automobile Club of America upon request by the secretary, and evidently he did not think it worth while to make a denial until the club showed an earnest of its intentions in the matter by adoption of the resolution to prefer charges against him. The judge says, in the same interview, that it is most disagreeable to see his name constantly in the public press; and, from the nature of the subject in connection with which his name has appeared daily for a fortnight, his sentiment is no cause for surprise.



Whitelaw Reid has told Rye, N. Y., that its local police should exercise their stopwatches on the drivers of fast horses as well as of automobiles. He approved their zeal against the latter, "on grounds of both safety and revenue;" but he forgot that the automobilists who make enforced contributions to Rye's treasury come from outside—most of them couldn't be hired to live in Rye,—whereas the horsemen are mainly a local product. The suggestion is excellent, but there is no danger of its being carried out.



In our report of the recent "Climb to the Clouds" on Mount Washington a typographical error is responsible for the statement that the average grade of the road on which the trails were run is 17 per cent. This is incorrect. The average grade is actually 12 per cent.

JERSEY ROAD MAPS FREE.

Because of the reputation New Jersey is fast gaining for its superior macadam roads, and the great number of requests from automobilists asking for information as to routes by which they can pass through the State over good roads, the Commissioner of Public Roads of New Jersey has prepared and now has ready for distribution a map of the entire State showing the improved roads in red and the unimproved roads in black.

These maps can be procured gratis upon application to Henry I. Budd, State House, Trenton, N. J., or at the New Jersey Exhibit at the St. Louis Exposition, which is in charge of Henry I. Budd and R. A. Meeke, the State Supervisor of Roads.

BIG DETROIT MEET.

Program of Two Days of Racing, August 26 and 27, and Parade.

Special Correspondence.

DETROIT, Mich., Aug. 8.—Detroit is planning for the biggest automobile racing event ning for the biggest automobile racing event in its history in the two days' meet of the Detroit Automobile Racing Association, to be held at Grosse Pointe track, Friday and Saturday, August 26 and 27. The full official program has just been announced by Secre-tary E. H. Broadwell. There will be six events each afternoon. A feature of the second day will be the Detroit Owners' Handicap, standing start.

second day will be the Detroit Owners Handicap, standing start.

In all the events first prizes only will be given. Prizes will be special in value from \$75 to \$200. Entries close August 25, with E. H. Broadwell, secretary, 254 Jefferson Avenue, Detroit.

One of the biggest features of the meet, which is expected to prove as popular as the races, is the parade of automobiles to be held Friday morning, August 26. There will be automobiles decorated with flowers and automobile floats. Every owner in Detroit has been invited to join in making this parade a good one, and special prizes will be given for the best and second best appearing cars. The start will be at Grand Circus Park at 9:30 a. m. The program for the two days' racing

follows

August 26: Five-mile open, any motive power and weighing under 1,432 pounds; ten-mile open, stock touring cars stripped, any motive power or weight; five-mile Manufacturers' Challenge Cup, open to manufacturers and their representatives; five-mile open handicap, standing start; five-mile motorcycle race; fifteen-mile open, any motive power or weight; record trials

and exhibitions.

August 27: Five-mile open, any motive power, under 1,432 pounds; Detroit Owners' Handicap, five miles, standing start; tenmile open; five-mile motorcycle handicap; five-mile handicap, standing start; ten-mile open, any motive power or weight.

POUGHKEEPSIE MEET PROGRAM.

Following is the list of events to be run September 16 at Poughkeepsie, N. Y.
The "Hudson"—Five miles for touring

cars, classes 2 and 3 (881 to 2,204 pounds), stock machines.

"Poughkeepsie Cup"—Ten miles, free-for-all, for all classes under American Automobile Association Rules, any motive power,

motorcycles barred.
"Catskill Chase"—Pursuit race, Australian style (distance unlimited). A challenge

event.

"Grand Dutchess Handicap"-Five miles, open to all, handicaps to be allowed in time.

Dutchess County Fair Championships-Five-mile events, open to all machines driven by owners who have residence in Dutchess County, or in New York State within fifty miles of Poughkeepsie. Cars must be stock machines, in roadster condition; must be driven by owner and carry one person besides the driver. (a) Chamtion; must be driven by owner and carry one person besides the driver. (a) Championship for cars of Class 3 (551 to 881 pounds); (b) Championship for cars of Class 2 (881 to 1,432 pounds); (c) Championship for cars of Class 1 (1,432 to 2,204 pounds). Cars in events (a) and (b), if they have detachable tonneaus, may remove them and race as runabouts, but under no circumstances may any car be "stripped." Cars having non-detachable tonneaus must carry the full body.

Grand Championship—Five miles, open to winners in (a), (b) and (c), and also to the second car in the fastest of these events.

In case the entries for the championships render preliminary heats necessary, they will be at one mile distances and may be held in the forenoon of the race day.

Record trials. Record trials.

It is of interest to note, in connection with this meet, that the following freight rates on automobiles to Poughkeepsie prevail: Carload, from New York City, via Hudson River Railroad, \$18; from Boston, via B. & A. and H. R. R. R., \$30; from Syracuse, \$35; from Buffalo, \$39. Single machines, from New York, via H. R. R. R., rated \$14.60; via Central

crated, \$12.60; uncrated, \$14.40; via Central Hudson Steamboat Co., \$5 to \$10 per machine; from Boston, crated, \$21, uncrated, \$24; from Syracuse, crated, \$24.50, uncrated, \$28; from Buffalo, crated, \$27.30, uncrated,

There are fine roads from both New York (76 miles) and Boston (226 miles) for those who care to drive their cars.

COAST MOTORCYCLE TEST.

Seven Out of Fourteen Make Perfect Scores in 100-Mile Run.

Special Correspondence.

SAN FRANCISCO, Aug. 2.—The second annual reliability run under the management of the Pacific Coast Motor cyclists was held Sunday, July 31, over the course around the bay of San Francisco. The start was from the corner of Larkin and McAllister streets, San Francisco, at 7.30 a. m. The run was then through San Jose to the Creek Route ferry slip in Oakland. to the Creek Route ferry slip in Oakland. The total distance was ninety-seven miles. At San Mateo, Centerville, San Jose and Oakland the contestants reported to the officials in charge of the control.

Riders finishing before or after the sched-ule time were penalized. No stops for repairs were allowed and several riders lost

time from punctured tires.

W. J. Bowman had a perfect score until near the end of the contest, but he reached Oakland two minutes before the schedule time. C. C. Hopkins had a tire punctured, but, by careful management of his machine, succeeded in making a perfect score. There were fourteen starters, of whom seven made perfect scores.

A. Navlet and H. Fuchs rode down from Sacramento to San Francisco on Saturday night and started Sunday morning without having had an opportunity to put their machines in order. An allowance of three minutes was made for variation of watches.

The official record is as follows: C. C. Hopkins, L. C. Black, F. M. Butler, L. Malsbary, J. W. Leavitt and E. C. Dreschman, 100 points each; W. J. Bowman, 98; H. Fuchs, 94; A. Navlet, 93; J. M. Litchfield, D. T. Fish, J. C. Larsen, F. E. Carroll and B. I. Bill, no score.

AUTO WEEK AT LONG BRANCH.

Long Branch will be in the possession of automobilists for the week of August 15 to 20 inclusive, if all signs do not utterly fail. The occasion will be the first annual automobile carnival of the North Jersey Coast Automobile Association, which has obtained a sanction from the racing board of the American Automobile Association to hold a race meet. There will be races of all kinds, on the beach and on the mile trotting track, the distances ranging from quarter of a mile and half a mile, for which there are no official records, to 100 miles, the longer races being run on the track and the short ones on the beach. The McMurtry electric timing apparatus will be used to insure the accuracy of the clocking. Among the novelties will be an automobile gymk-hana, which will be held at the Horse Show

DEL MONTE DATES FIXED.

Interesting Events Scheduled for Three-Days' Coast Tournament.

Special Correspondence.

SAN FRANCISCO, Aug. 4.—Dates for the racing tournament to be held at Del Monte have been advanced from August 18 to 21 have been advanced from August 18 to 21 to August 25 to 28 by the executive committee of the A. C. of California following the return a few days ago of Chairman L. P. Lowe from Los Angeles, where he had been in conference with the officials of the A. C. of Southern California relative to both the Del Monte meet and the San Francisco-Los Angeles 1,000-mile round trip endur-ance run. The reasons for the postpone-ment are that a number of new cars which it is desired to enter have not arrived from the East, and many of the members of the A. C. of California are also members of San Francisco's famous Bohemian club, and August 18 to 21 is the time selected for the latter club's annual camp life and jinks in Russian River Valley, and the members of both clubs are anxious not to miss either event. The endurance run has been de-ferred to the first week in September following the Del Monte meet.

Motorists going by road from 'Frisco to the Del Monte meet will start on the morning of Thursday, August 25. Friday and Saturday there will be races on the Del Monte track, and Sunday, August 28, a trip will be made round the Seventeen-Mile Drive. Several motorists from Los Angeles will attend the meet, some of them making the run to Del Monte in their cars.

The principal feature of the meet will be the initial contest for the Lowe interclub challenge trophy, offered by L. P. Lowe as a perpetual challenge cup for clubs only. This cup is subject to challenge for any event on the ordinary meet program. While the initial event will be a five-mile race, open to any car selected by the clubs participating, it may in the future be contested for in a hill-climbing contest or an endurance run, as may be stipulated under the terms of the deed of gift, which are now the terms of the deed of gift, which are now being prepared. The trophy will be the most valuable cup ever offered on the Pacific Coast, standing fully three and a half feet high, and will be of elaborate design. In all probability the Automobile Club of Southern California will select Frank Garbutt's new racing car, Snowball, to represent it. It is expected that the Pasadena club will send a car and there are a number of candidates among the San Francisco machines, including Dr. J. D. Hill's 60-horsepower Mors in which Fournier made the Paris-Berlin record three years ago. Paris-Berlin record three years ago.

Another interesting event will be the deciding heat in a match between Garbutt's Snowball and Captain Ryus's racer, the White Ghost, which is also owned in Los Angeles. Two five-mile heats have already been run at Los Angeles, one being captured by each car. There is a great deal of rivalry between the two drivers and the race promises to be a hot one.

August 26.—Three miles for gasoline

stock runabouts and light touring cars 10 1-2 stock runabouts and light touring cars 10 1-2 horsepower and under; five miles for gasoline stock light touring cars, \$1,500 and under, touring condition; five miles for gasoline stock cars, 10 to 16 horsepower; five-mile Garbutt-Ryus match race; five-mile open, for stock cars, \$1,200 to \$2,550; five mile open, stock cars, 10 to 24 horsepower; pursuit race, gasoline stock cars \$1,001 to \$2,550; five-mile free-for-all.

August 27.—Three miles for gasoline stock runabouts and light touring cars, \$1,000 and under; ten-mile open, stock touring

000 and under; ten-mile open, stock touring cars \$1,551 to \$4,000, touring condition;

five-mile open, stock cars 10 to 16 horse-power; five miles for Lowe Inter-Club Chal-lenge Cup; five-mile open, stock cars \$2,000 to \$4,000; five-mile open time handicap for the Del Monte Cup; pursuit race, stock cars \$2,501 to \$4,000; five-mile free-for-all; pur-suit race, free for all.

August 28.—Hill-climbing contest. Stock

runabouts and light touring cars, \$1,000 and under; stock touring cars \$1,001 to \$2,550; stock cars \$2,000 to \$4,000; free for all.

MINNEAPOLIS TWO-DAYS PROGRAM

Special Correspondence.

MINNEAPOLIS, Aug. 8. — Arrangements have been completed for the automobile race meet to be held at Hamline Track August 17 and 18, under the auspices of the Min-neapolis Automobile Club. Customary con-ditions will govern the several events, with the exception that the cars must be driven in road form in all races except the professional events.

Several large eastern racing cars have been entered, and two or more contests by these will be held each afternoon, for which special prizes will be awarded. In the touring car race the machines will be required to carry passengers as stipulated in addition to the ordinary touring car equipment.

Entry blanks, with full particulars, can be obtained from R. F. Jones, 1600 Hennepin avenue.

The program as announced is as follows: August 17.-Five-mile Minneapolis Derby, 40-horsepower or under; 8-horsepower or under; two-mile, 12-horsepower or under; two-mile, 16-horsepower or under; five-mile, 90-horsepower or under. August 18.—Challenge Race, St. Paul vs.

Minneapolis, 40-horsepower or under; threemile, 20-horsepower or under; ten-mile touring car race, 30-horsepower or under, each machine to carry three or more passen-gers weighing not less than 130 pounds each; two-mile, 90-horsepower or under; three-mile, 24-horsepower or under; sweep-stakes; one-mile free-for-all; trials for track record.

LAUNCH RACES AT 1,000 ISLANDS.

Special Correspondence.

THOUSLAND ISLAND PARK, N. Y., Aug. 8.

The next auto-boat races of the Chippewa Bay N. C. will be held August 13. Many speedy launches are entered. Three silver cups are offered the winners in the followdivisions:

Class 1, boats of 5 horsepower and less; class 2, boats of 40 horsepower and less; class 3, boats of over 40 horsepower rating. The rules are those of the American Power

Boat Association.

The Comanche, owned by S. G. Vander-grift, of Pittsburg, will arrive here next week. She was built by the Seabury Comweek. She was built by the Seabury Company at Morris Heights, and is equipped with a 300-horsepower engine of nine cylinders. She measures 66 1-2 feet, with a 6-foot beam. The builders guarantee a speed of thirty miles an hour.

"ADIOS" WINS LAUNCH RACE.

Special Correspondence.

ALEXANDRIA BAY, N. Y., Aug. 10.—The racing auto-boat Adios, built by H. J. Leighton, Syracuse, won first place in to-day's free-for-all race for gasoline boats, there being no handicap or time allowance. The distance was 14 1-2 miles, which Adios covered in 39 minutes 44 seconds, beating four other boats, Pappoose, Roma, Radium and Carmencita. Second place was won by Pappoose, a minute and a half after Adios.

OMAHA TROLLEY ACCIDENT.

Street Car Runs Down Automobile Party in Miller Park.

Special Correspondence.

Омана, Aug. 3.—An accident near Miller OMAHA, Aug. 3.—An accident near Miller Park yesterday, in which C. E. Perkins, chairman of the board of directors of the Chicago, Burlington and Quincy railroad, and J. D. Robinson, of New York, and their wives, were injured was apparently due to the carelessness of the motorman of a trolley car that ran down the automobile they were riding in.

Mrs. Perkins was so seriously hurt that she was unconscious for four hours, and it was at first feared she would die. Later, however, she showed such marked improve

ment that it is now believed the accident will have no serious effects.

Miller Park is some distance from Omaha. The trolley line parallels the road for some distance. The crossing is near one corner of Miller Park, where the road transparent parallels where the road transparent parallels where the road transparent parallels are recommendations. runs obliquely.

The motorman, in his version of the accident, naively states that he saw the automobile coming some distance away, but did not take any precautions at the cross-ing, as he did not suppose that the automobile would attempt to cross in front of him. He did not slacken the speed of his car, he adds, although admitting that the

crossing is a very dangerous one.

On account of the prominence of Mr.

Perkins, the matter will be thoroughly investigated, as the street railway company is as anxious as anyone to fix the blane for the accident

STUDYING JERSEY'S STONE ROADS.

Special Correspondence.

TRENTON, Aug. 8.-A. Marston, dean of the division of engineering of the Iowa Col-lege of Agriculture and Mechanic Arts, has been inspecting the improved highways of Mercer County as a member of the Iowa State Highway Commission during the past week to investigate thoroughly the Jersey methods of macadam road construction and familiarize himself with the working of the state road law. As the guest of Henry I. Budd, State Road Commissioner, and Frank Eppele, County Engineer, Mr. Marston went over Mercer and Burlington county roads in Mr. Eppele's Winton car.

At the recent session of the Lowa Legis-

At the recent session of the Iowa Legislature, the State college was designated as the state highway commission. It will carry on the road work under the direction of Dean Curtiss, of the College of Engineering, and Mr. Marston, who is professor.

ASSESSING AUTOS IN ALBANY.

Special Correspondence.

Albany, Aug. 8.—Citizens of Albany have been discovered by the city's tax assessors to own somewhere in the neighborhood of 100 motor vehicles, and as the machines cost more than a horse and carriage, as a rule, the assessors have decided to boost the personal property assessment of such citizens by including the value of their automobiles

automobiles.

This will be the first year that autos have been generally assessed here as personal property. Last year only two or three motor vehicles figured in the personal property assessments. Last week the assessors made a tour of the garages and secured a list of the cars stored. They are now said to be studying up the price lists of the different manufacturers. There is not more than one \$10,000 motor car in the city, but than one \$10,000 motor car in the city, but several are over the \$2,000 price limit, while

there are a number of buckboards and runabouts costing from \$350 to \$600, \$800 and \$900. More expensive cars have been purchased this year than ever before, and the assessors' attention has been attracted to the talk and published statements of their cost. Those who have been swelling the cost of their machines for the purpose of boatsing of it are now regretting the fact.

AMERICAN AUTOS AT MANITOBA.

Special Correspondence.

WINNIPEG, Manitoba, Aug. 5.—With a view to increasing the interest in automobiles in western Canada, the Canada Cycle and Motor Company has arranged a good display at the Dominion of Canada exhibition which opened last Tuesday, July The exhibit includes the Thomas, Ford, Autocar, Stevens-Duryea, and the Ivanhoe, the last mentioned being manufactured in the company's works at Toronto. Con-siderable interest has been taken in the display by a large number of Western men, and it is anticipated that good busi-

ness will result.

McCulloch & Boswell are showing four examples of the Pearson Boat Construction Co's. gasoline launches, especially designed for river work. They range from a 1-2-horsepower 16-foot to a 12-horse-24-foot launch built on torpedo boat lines. The Pearson Company's works are at Du-

luth, Minn.

MOTORIST KILLED IN MONTREAL.

Special Correspondence.

Montreal, Aug. 8.—The first fatal accident in this city occurred Saturday afternoon, when A. J. de B. Corriveau, president and general manager of the General Automobile Company of Canada, was run into by an electric car within a stone's throw of his office. He died from his injuries in the hospital seven hours after the accident with a fracture at the base of the skull with a fracture at the base of the skull.

Mr. Corriveau was driving his automobile alone when he collided with a street car. The impact was so great that he was hurled headlong against the sidewalk. The deceased, who was in his fifty-second year, recently took a fancy to the automobile, and developed a good business. Some time ago he was elected unanimously to the vice-presidency of the Automobile Club of Canada, recently organized in this city.

RECENT INCORPORATIONS.

D. B. Dunham & Son, Rahway, N. J.; to manufacture and deal in automobiles, coaches, cars, bicycles and boats; capital stock, \$100,000; incorporators, Emma F. Dunham, Frederic W. Dunham and T. B. Lindsay.

Peoria Automobile Co., Peoria, Ill.; capital \$5,000; to manufacture motor vehicles; incorporators, S. K. Hatfield, Charles L. incorporators, S. K. Gage and E. M. Giles.

Importers' Automobile Salon of Mount Vernon, N.-Y.; capital stock, \$4,000; direc-tors, E. T. Birdsall, S. B. Bowman and E. B. Gallgher, of New York City.

Automobile Transfer Co., Cleveland, O.; capital \$10,000; to conduct an automobile livery in connection with large hotels. Incorporators, George A. Welch, F. A. Quail, G. B. Siddall, O. G. Bechtel and George McGregor, Jr.

The Interstate meet at Leavenworth, Kas., has been postponed until some time in September. W. W. Guthrie, president of the association, writes that the postponement was occasionad by the A. A. A. tour to St. Louis.



CROSS COUNTRY RUN.

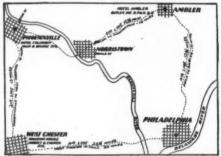
Philadelphia Club's Second Annual Go-As-You-Please Cup Contest.

Special Correspondence.

PHILADELPHIA, Aug. 8.—The Runs and Tours Committee of the A. C. of Philadelphia will announce this week the rules government of the accord annual run to be held erning the second annual run to be held October I for the Cross-Country Challenge Cup presented to the club by Secretary-Treasurer H. Bartol Brazier, which was won for the first time last year and is now held by A. H. Chadbourne.

One of the points which will be especially emphasized is that the run is in no sense a race (although the first man to finish secures the cup); and another that, apart from the necessity that each contestant shall report to the judges at the official stopping place in each of the four tours on the rectangular course, there will be no special route to be adhered to between these points.

In the accompanying diagram is shown the general lay-out of the route and the air-



LOCATION OF CROSS COUNTRY ROUTE.

line distances between towns. In cutting across country from Ambler to Phoenix-ville, and from the latter place to West Chester the actual number of miles to be traveled is out of all proportion to the airline distance, and the possibilities in the way of selection of routes are so numerous as to make a right choice of no little im-portance. The result of the announce-ment will doubtless be many quiet preliminary excursions over the various routes in an effort to secure the best, and this without giving one's opponents a line on the best going.

Between Philadelphia and Ambler and between West Chester and Philadelphia the choice of routes is limited, although by making a detour to Paoli on the last leg of the course a bad section of the West Chester pike is avoided, at the expense of several additional miles' travel.

Each contestant will be supplied with a time card, which must be signed by the judges at the various points named, who will mark thereon the time of each car's arrival and departure. A large sign will be placed in a conspicuous position in front of each stopping place.

'FRISCO CLUB TO STOP SCORCHERS. Special Correspondence.

SAN FRANCISCO, Aug. 1.—The matter of speeding on country roads is being taken up by members of the Automobile Club of California, and it is more than likely that some definite action will result, looking to an active discouragement of the evil. Some of the local automobilists are just now experiencing the speed-craze stage, and those who are not themselves bitten by the dis-ease are frequent sufferers from it. Owing to the fact that the general use of the roads by automobiles is a comparatively re-cent condition in this portion of the country, there are many operators who fail to appreciate the rights of others to the public highways, as well as the dangerous character of racing speed. The result is such as has been experienced in other sections. The natural antagonism of the farmer has been increased and a number of serious accidents have aroused the authorities.

So many complaints have been heard in the past few weeks, and the adverse tem-per of the town authorities in many places has become so apparent that the more conservative drivers who form the majority of automobile users have become alive to the need of protection from their own class. There is therefore a disposition to create a new committee in the club which shall take up the matter of excessive speeding, investigate cases brought to its attention and report evidence to the authorities. It is felt that by co-operation with other users of the roads against the reckless drivers, the governing body among local automobilists may be able to overcome the resentment which is at present being directed against the whole class. Unless something of the sort is done there is danger that many of the most desirable roads will be closed to automobiles.

NEWS NOTES OF THE CLUBS.

PROVIDENCE, R. I.—The recent tour of the Rhode Island A. C. along the Massachusetts coast was so successful that it has been decided to hold a longer run into that state, Onset to be the destination.

VAN WERT, O .- An automobile club has been formed here with the following of-ficers: D. L. McDonald, president; Dr. ficers: D. L. McDonald, president; Dr. S. S. Tuttle, vice-president; M. Woodruff, treasurer, and Robert Webster, secretary.

Mobile, Ala.—The Mobile A. C. has been formed with a charter list of twenty-six members. The following officers were elected: Gen. J. W. Whiting, president; Robt. C. Morris, vice-president; E. G. Hubbard, secretary, and Wm. A. Blair, treasurer.

WACHUSETT, Mass.—The A. C. of Fitchburg held its postponed run to Hull, Mass., last Saturday. The participants stayed over night in Hull and Sunday morning all made the run into Boston for lunch, returning home in the afternoon.

PADUCAH, Ky.—The A. C. Paducah was organized August 3, with the following officers: Col. Ben Weille, president; Henry Arenz, vice-president; Dr. Boyd, secretary and treasurer. The first club run was held last Sunday, to Mayfield, Ky., a distance of thirty miles, and return, the round trip being made without a mishap.

NEWARK, N. J.—At a recent meeting of the Physicians' A. C. of New Jersey, Dr. Frank D. Meeker, of Newark, was elected vice-president to succeed Dr. W. H. H. Bull, of Glen Ridge. The club will hold no meetings during August, but will hold a general meeting September 15. The club new has thirty members now has thirty members.

Toledo, O .- At a recent meeting of the directors of the Toleedo A. C. it was decided not to fight the wheel tax, but to submit to the law and pay the annual \$4 assessment. After the meeting those in attendance went to the auditor's office and secured licenses, Dr. Chas. P. Wagar, the club's president, being the first applicant.

HARTFORD, Conn.-At a recent meeting of twenty-five motorcyclists preliminary steps were taken toward the organization of a motorcycle club. A committee was ap-pointed to draft by-laws and constitution, to be submitted at another meeting to be held at an early date, at which time officers will be elected and steps taken toward the establishment of club quarters.

DETROIT.—The Detroit A. C. enjoyed a very pleasant run Tuesday evening to its country clubhouse on Birmingham road, fourteen miles out of the city. About 200 Japanese lanterns were strung over the grounds. It was a go-as-you-please run out and about 125 members and friends partici-pated. Luncheon was served on the lawn under the lanterns and the affair, the first of its kind this year, was a great success.

NEW YORK.-The New York and Phila-New York.—The New York and Thila-delphia Limited is the name by which the New York Motorcycle Club designates a club run to Philadelphia and return called for August 28. The title is derived from the limitations of eleven and fourteen hours as the minimum and maximum times within which the run must be made. The distance for the round trip is 200 miles—the longest single day's run ever organized by a motorcycle club, but the roads are unsur-

Springfield, Mass.—At a recent meeting the Springfield Automobile Club decided to start a campaign to require all vehicles used at night to be provided with lamps, as are bicycles and automobiles under the existing laws. Steps will be taken at once to secure the passage of such a law. The question of speed regulations was postponed until a later meeting. The club members disclaim any intention of supporting any one in violation of the law, but object to being continually harassed by the country constables who, they say, are out for their share of the fines.

SPRINGFIELD, Ill.—The temporary organization of automobile owners of Springfield zation of automobile owners of Springheld has been made permanent by the formation of the Springfield A. C., the following officers having been elected for the ensuing year: Burke Vancil, president; Henry M. Merriam, vice-president; R. B. Seymour, secretary, and Ralph N. Baker, treasurer. A special committee has been appointed to confer with the Board of Park Commissioners in an effort to have their reconsider. sioners in an effort to have them reconsider their order prohibiting automobiles from the park after 6 o'clock, and other restric-

BIRMINGHAM, Ala.—Several members of the recently organized Birmingham Motor Club, accompanied by their families, will make a tour to St. Louis and return, leaving Birmingham about August 15. The distance between the two cities is 520 miles, and it is expected they will be able to make the trip in five days each way. Those now scheduled to make the trip are R. S. Munger, president of the club; Dr. J. E. Dedman, Don H. Bacon, F. G. Kinney and Mr. Brown. The entire club membership will escort the tourists out of the city and as far as Pinson.

namy newspaper contains the following somewhat startling advertisement: "For Sale—261 horsepower gasoline touring automobile. * * * Reason for selling, owner purchasing larger machine." The natural query is, what will be the horsepower of the new car? A daily newspaper contains the follow-



The resolutions adopted by the Board of Governors of the Automobile Club of America at their last meeting, to prefer charges against Magistrate Cornell, of New York city, who has made himself famous by his alleged remarks concerning the shooting of automobilists, bore fruit with wonderful promptness, the magistrate losing no time in publishing a general denial of the correctness of the popularly accepted version of the story. A short time after his "shoot-ing talk" the board of governors of the A. C. A. wrote to Magistrate Cornell ask-ing if he had been rightly reported, and if not, that he give his version of the affair. The magistrate's answer was that he saw no reason why he should comply with this request; and he did not. But the ink was hardly dry on the newspaper reports of the automobile club's decision to prefer charges against him before Magistrate Cornell was busy dictating a full and complete state-

ment of the matter.

He says it occurred in this way: A bicycle policeman brought an automobilist before the magistrate, charging his prisoner with furious driving and having badly scared a lot of pedestrians and forced a cab to take to the sidewalk. After having heard the case the magistrate said in an aside to the bicycle policeman, whom he had known for years, that if any of the people had been run over he would not have blamed any of them so very much if they had shot at the chauffeur. This remark, the magistrate admitted, was an unwise one, but was not intended for publication. The magistrate says that he informed a reporter who interviewed him the next day that probably the only thing that would have stopped an automobilist who almost ran him down was shooting, but that this was not his notion of the proper way to put an end to reckless driving, which, he thinks, can best be cured by imprisoning the drivers. Moreover, he declared that his remarks, as over, he declared that his remarks, as quoted, were not responsible for the revolver practice of Deputy Sheriff Wicks at Patchogue, L. I., and that he has a document to prove it. The deputy sheriff, curiously enough, is said never to have heard of Magistrate Cornell.

President Scarritt, of the Automobile Club of America, after having read Magistrate Cornell's statement, issued an an-nouncement through the club that the charges would be withdrawn.

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Deputy Sheriff Wicks, of Patchogue, L I., is now confronted with the certainty of having to shoulder the consequences of his act in shooting bullets from his revolver York, on July 17, because Wicks claimed the automobile was running at an illegal speed and was not stopped when he ordered. The Automobile Club of America has taken the Automobile Club of America has taken the matter up and is standing behind Mr. Foley in the matter. Wicks was arraigned August 5 before Justice John R. Vunk on the charge of felonious assault preferred by Mr. Foley. Waiving examination, the deputy sheriff was held in \$500 bonds for trial by Grand Jury, which meets at Riverhead, L. I., in September.

The automobilists of New York city will, it seems, have either to put up with the

refusal of the ferry companies to allow automobiles to board ferry boats under power, or else bring a test case into court to settle the question. The committee of the Auto-mobile Club of America appointed to go to Washington and endeavor to secure from Secretary Metcalf, of the Department of Commerce and Labor, a correct interpreta-tion of the law forbidding the carrying on passenger steamers of gasoline in automobiles with lighted fires, has returned without having been able to accomplish its object. Mr. Metcalf stated that he would have to give the matter further consideration, and would give a reply later. It is believed, however, that the Secretary will find himhowever, that the Secretary will find film-self without power in the case. Jefferson Seligman, of the board of governors of the club, and W. W. Niles, the club's counsel, who composed the committee, stated that a legal fight may be necessary to bring the matter to a conclusion.

Only two American entries have been received for the Vanderbilt Cup race, set for October 8, both entries having been made by the White Sewing Machine Company. Two foreign cars have been entered by the Panhard & Levassor agency, and these four cars constitute at present the entire list of competitors for the cup. Correspondence is now being carried on between the racing board of the American Automobile Association and S. F. Edge, who is expected to enter a Napier car. American gasoline cars are so far invisible

Chairman A. R. Pardington, of the racing board, calls attention to the fact that the entry list will be absolutely closed Sep-tember 8, and that entries must be accompanied by a letter bearing the signature of the secretary of the automobile club the

car will represent in the race.

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Secretary S. M. Butler, of the A. C. A., went to Hammonton, N. J., Wednesday, August 10, to endeavor to round up a man who has been firing charges of buckshot into passing machines on the road that runs between Atlantic City and Philadelphia. The identity of the shooter is not known, but a reward of \$500 will, if necessary, be offered for his apprehension. Mr. Butler will continue his investigations in Philadelphia. Automobilists throughout the city and district are very indignant rethe city and district are very indignant re-garding the reckless use of firearms, and some have taken to carrying revolvers in self defense. Hold-ups and robberies in the name of the law by enterprising high-waymen are regarded as the probable next step in this sort of lawlessness.

Broadway is blocked at Kingsbridge, just across the Harlem River ship canal, on account of a squabble between paving companies concerning the right of the firm doing road work at that point to use a certain kind of paving block. The result is that for the past two weeks automobilists going north have been forced to turn out of Broadway and take Kingsbridge avenue and the steep and rough hill that forms the approach to the bridge over Spuyten Duyvil creek. Many cars are unable to negotiate these grades. The only other way for automobiles going north through Washington

Heights to get out of the city is to go back to Amsterdam avenue and take Washing-ton bridge. It is possible that several weeks may elapse before the controversy is settled. * * *

A trap for automobilists has been set at A trap for automobilists has been set at Lawrence, L. I., and machines are timed over a stretch of road by means of a telephone system. When a car has been timed as going faster than the legal speed an armed deputy jumps out of the bushes and holds up the chauffeur—very likely at the muzzle of a revolver. Most ironically, one of the first motorists to be get caught was the instigator of the scheme. the instigator of the scheme.

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One of the trapped automobilists was Samuel L. Herzig, of New York, whose case was taken in hand by the Automobile Club of America. The trial was set for Tuesday, August 9, and when the appointed time arrived the little court room at Lawrence was filled with New York automobilists, much to the surprise of Justice Tybilists, much to the surprise of Justice Tyson. The trial ended abruptly when it was discovered that Mr. Herzig's name had not been entered in the records, no defendant being mentioned in the complaint. Justice Tyson said a new warrant would be issued in correct form, but it is believed this is not Mr. Herzig declared that he preferred being re-arrested in order that the case might be fought out, but it is doubtful if this can be done.

James B. Dill, of New York, has reached his destination at the Rangeley Lakes, Maine, after touring by automobile to Que-bec and from there to Rangeley through the Canadian pine woods. The roads for the most part were found to be good, or at least fair, comparatively few really bad stretches having been traversed. A large quantity of gasoline was sent ahead by freight, as this fuel is very scarce in parts of the country passed through. Mr. Dill has made a complete set of descriptive charts for the guidance of future tourists over the same route.

Police Commissioner McAdoo, of New York City, is considering the advisability of mounting a squad of policemen on motorcycles, which would enable them to overtake anything that came down the pike. One of the members of the force was provided with a members of the force was provided with a machine a short time ago as an experi-ment, and the Commissioner was so pleased with the result of the test that he is said to have asked the Board of Estimate and Apportionment for the necessary funds to equip the entire bicycle squad with wheels.

It is believed by the police that burglars who have been helping themselves to the valuables of wealthy New Yorkers residing along Long Island Sound, have been traveling in an automobile. The tracks of a heavy car and traces of oil were found in front of houses that had been robbed.

Policemen out West are reported to be practicing revolver shooting so they can puncture the tires of scorchers who decline to stop. They seem to have had very poor luck so far, the tires proving hard targets to hit.



B. M. Shanley, Jr., is a recent purchaser of a 12-16-horsepower Decauville, fitted with a tonneau and folding canopy top.

R. W. Massey, of Cadillac, Mich., has secured the agency for the Northern automobiles.

The Reeves Pulley Company, of Columbus, O., has decided to commence the manufacture of automobiles, and will enter upon this class of work at once.

C. J. Durheim, dealer in bicycles and automobiles at Muskegon, Mich., has filed a petition in bankruptcy, giving his assets at \$3,700, and liabilities, \$6,600.

Walter Crawford, formerly with the Cleveland Automobile & Supply Company, has become identified with the Automobile Exchange on Prospect street, Cleveland, and has obtained the agency for the Crest.

Neff E. Parish, president of the Parish & Bingham Company, of Cleveland, has resigned his position to go into other business.

J. H. Jones and L. M. Taylor, of Charleston, S. C., have completed arrangements for the operation of an automobile passenger service between Spencer and Salisbury, N. C. One 'bus has already been received at Spencer, where headquarters of their company will be located. The Yadkin River Power and Park Company, recently organized at Spencer, will also have four automobiles running over the same route within a week.

The Auto Coach Transportation Co., now being formed at Rochester, N. Y., will soon put in operation an automobile passenger coach line between Rochester, Fairport and Penfield. The vehicles will be of thirty horsepower, and have a carrying capacity of twenty-five passengers.

Herman K. Haupt, superintendent of the garage of the Washington Electric Vehicle & Transportation Co., of Washington, D. C., has been arrested on a charge of embezzling certain funds of the company and has been held in \$1,500 bond to await the action of the grand jury. Haupt has been connected with the company for the past five years.

The Peerless Motor Car Company has sold a special 24-horsepower car to John D. Rockefeller, who recently sent invitations to all the Cleveland automobile dealers to send cars for his inspection to his summer home east of the city. The Peerless took his fancy and he ordered a special body with silver trimmings and pearl inlaid steering wheel. The car will cost him \$5,000.

Through the courtesy of the Washington Jockey Club the Central Labor Union has made arrangements to hold automobile races at the Bennings race track, at Washington, on Labor Day. The Washington Automobile Racing Association has sanctioned the undertaking, and will lend its support toward making the event a success.

A three-cylinder Thomas Flyer took part in the Toronto (Canada) automobile races Saturday, August 6, and won first place in the five-mile race for stock cars and was a close second in a two-mile race for cars costing less than \$7,000. The machine was a new one, fresh from the factory.

The District Attorney of San Mateo County, California, has prepared and presented to the board of supervisors an ordinance limiting the speed of automobiles in the county to five miles an hour on the

mountain roads and fifteen miles on the main country roads. Operators must procure a permit from the county clerk, at a fee of \$1, and the applicant must show that he is a skillful operator of at least two months' experience. There are various other provisions and a maximum penalty of \$500 fine or six months' imprisonment is provided for violation of the ordinance.

The Boston Automobile Trade Association has been organized with seventeen charter members. The officers are: President, W. W. Burk; secretary, A. T. Fuller; treasurer, A. P. Underhill. The board of directors consists of the officers and W. E. Eldridge and A. H. Bangs. A committee consisting of W. E. Eldridge, Benjamin Smith and A. F. Uuderhill has been delegated to make application to the N. A. A. M. for a sanction to hold a one-week show immediately after the New York automobile show, or as soon thereafter as possible.

The manufacturers of the G & J tires, Indianapolis, Ind., are calling attention to the fact that every one of the twenty-three motorcycles that participated in the recent New York-Albany endurance run of the F. A. M. were fitted with G & J tires. George Breeze, of Newark, N. J., was scheduled as using tires of another make, but in a letter to the G & J Tire Company he stated that this was an error, his tires, which he is still using, being the same as the others.

The Packard Motor Car Company's representative at the St. Louis Exposition will be Arthur Visick, formerly with the English Napier Company.

A Michigan light touring car, recently purchased by Dr. F. J. Dudley, of Cerro Gordo, Ill., was driven by him from the factory at Kalamazoo, Mich., to his home, a distance of about 250 miles. It is reported that the trip was a very successful one, and that Dr. Dudley intended entering his car in the St. Louis run.

The plant of the Providence Steel Casting Company, Providence, R. I., has been enlarged to meet the growing demand for this class of goods. The new foundry is 166 feet long and 118 feet wide, and is completely equipped for handling both raw materials and finished castings. The plant has a capacity of 100 tons a month and handles work weighing from a few ounces up to tons.

Trials of steam railway motor cars have been so successful on branches of the Great Western Railway Company, of England, that they are now being used on three divisions of that road. The cars are built after the American plan, with a center aisle running the length of the car. The vertical boiler is in one end, separated from the passenger space by a partition. The engine has two cylinders with piston rods driving direct to the truck wheels, locomotive fashion. Power enough is developed so that an ordinary car can be hauled as a trailer. The motor cars accommodate fifty passengers and cost \$9,733 each.

The Boston branch of the Pope Manufacturing Company will hereafter be under the management of W. J. Foss, formerly of Washington, W. E. Eldridge, the former manager, having resigned.

A party of Indianapolis automobile tourists arrived in Buffalo last Saturday after-

noon on their way to Boston. The party consists of Mr. and Mrs. F. M. Ayres, Miss Hoegh and W. C. Bobbs. They are travelling in a 40-horsepower Premier touring car. They left Indianapolis last Tuesday and made 180 miles the first day. It is planned to reach Boston by Thursday. Mr. Ayres said the roads in most places were fairly good.

The Chicago, Burlington & Quincy R. R. is experimenting with electric motor cars with a view to adopting them for use on the line between Sterling and Shabbona.

Superintendent T. M. Ellis, of the Rockford and Interurban Railway Co., Rockford, Ill., is using a Pope-Waverley in overseeing the work on the various lines of the company.

An ordinance regulating the speed of automobiles, providing for their registration and numbering, and taxing owners \$1 for a permit to operate them on the streets is now in force in Birmingham, Ala.

The Covenant Baptist Church of Chicago has recently been holding a series of street meetings, using an automobile in lieu of the conventional horsedrawn gospel wagon.

The town council of Pottsville, Pa., has passed an ordinance limiting the speed of automobiles to a mile in twelve minutes going down a declivity or turning a corner, and eight miles an hour on level ground. It provides a fine of \$100 for violation.

The Golden Gate Park Commissioners of San Francisco have announced that in addition to the South Driveway the automobilists will in the future be allowed the use of the East Boundary Driveway of the park, which crosses the ornamental park bridge and gives a short straight route to the surf-line at automobile beach.

The California Auto Express Co., of San Francisco, which was organized to conduct a general automobile business, is now preparing to put in operation in connection with its other business a general freight and passenger service, using a type of vehicle similar to that now in use by the General Omnibus Company of London. The company will also have the agency for several well known cars.

Representatives of the Packard Motor Car Co. appeared before Judge Phelan, in Detroit, last week, on the complaint that they had duplicated license numbers. The company employs a large number of demonstrators and every day is sending machines out for their road test. The duplication of the license numbers was confusing to the police and Judge Phelan suggested that it would be much better if the company would purchase a license for each demonstrator in its employ and require him to put his license tag on the machine he is taking out. If the licenses were kept in the name of the demonstrator no confusion would result. The company could then send notice of the dismissal or retirement of the demonstrator from its employ to the secretary of police, and a correct record could then be kept. The purpose of the law, Judge Phelan explained, was not to keep track of the machines, but of the operators. The company agreed to take up the method and it is regarded so favorably by other local manufacturering concerns that it is thought others will follow suit shortly.